Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl

WBS Filter 1EEC
Activity Filter *

Starts 1	nF	Y '

WBS No: 1EEC Activity ID: 1EE	701Title:881 Cluster Stabilization/HaC1000Description:881 Cluster Stab/Hazards Re						Cost Risk	2 Schedule R		77.55 17.6 1	
Line Item	Description	Quantity	Units BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
881HR001	HR Project Execution Plan	1.00 e	ach EE	157	157	8.409	16.382	0	24.791	4.094	28.885
881HR002	HR Work Procedures	1.00 e	ach EE	142	142	5.213	4.707	0	9.920	2.538	12.458
881HR003	Proiect Engineering	1.00 e	ach EE	79	79	4.205	0	0	4.205	2.047	6.252
881HR005	Develop Health/Safety/Emer. Plan	1.00 e	ach EE	488	488	14.621	0	0	14.621	7.119	21.740
881HR006	Collect & Develop CDPH&E Data	1.00 e	ach EE	385	385	13.102	2.593	0	15.694	6.379	22.073
SYS	Contingency And Escalation	1.00 e	a EE	0	0	0	0	457	457	0	457
	Tota	al for Activity	1EEC1000:		1.250	45.549	23.681	457	69.687	22.178	91.865

Line Item 881HR001 - HR Project Execution Plan

Line Item 881HR002 - HR Work Procedures

1EEC01

1EEC1000

BOE

WBS No:

Activity ID:

Estimators Experience - Estimate was developed by B.881 Facility Manager with over 20 years experience deactivating and decommissioning nuclear facilities, including the past five years at RFETS as the Maintenance Manager and Facility Manager.

Experience Item Desc - Project Execution Plan Initiation and Development

Breakdown of Cost Data:

Item - PEP Development
Units - 1)Hours 2)Dollars
Unit Cost - 1)200 2)20,350
Unit Cost Adjustment factor - None
Revised Unit Cost - N/A
Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es			Cost Element		Skill		Department	Curve	2	Ouantity	Units
	750	STRAIGH	T TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C104S	Closure Management	Linea	r	19.67	Hours
	Factors	25	Hours		0.36123 May Earned Value Factor						
_								2.17762 [5	SYS 061300	1 2.177624 - Ta	arget
	750	STRAIGH	T TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C104S	Closure Management	Linea	r	137.66	Hours
	Factors	175	Hours		0.36123 May Earned Value Factor						
_								2.17762 [5	SYS 061300	1 2.177624 - Ta	arget
											

						2.17702 1010 00100	OIZ.ITTOZT TAIACL
A5H	SUBCONTRACTED SRVS	P160	TECHNICAL WRITERS AND EDITOR	C104S	Closure Management	Linear	4.706.85 Dollars
Factors	26 weeks		225 Dollars per Week		1.02283 FY00 Escalation	0.36123 May Earned	Value Factor
						2.17762 [SYS 06130	0] 2.177624 - Target
A5H	SUBCONTRACTED SRVS	P160	TECHNICAL WRITERS AND EDITOR	C104S	Closure Management	Linear	11,674.67 Dollars

Factors 14510.1 Dollars 1.02283 -- FY00 Escalation -- 0.36123 May Earned Value Factor

2.17762 [SYS 061300] 2.177624 - Target

BOE

Estimators Experience - Estimate was developed by B.881 Facility Manager with over 20 years experience deactivating and decommissioning nuclear facilities, including the past five years at RFETS as the Maintenance Manager and Facility Manager.

Experience Item Desc - HR Work Procedure Development

Breakdown of Cost Data:

Item - Work Procedures
Units - 1)Hours 2)Dollars
Unit Cost - 1)280 2)7,000
Unit Cost Adjustment factor - None
Revised Unit Cost - N/A
Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es		Cost Element	Skill	Department	Curve	Ouantity Units
	750	STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C104S Closure Management	Linear	27.53 Hours

Factors 35 Hours 0.36123 May Earned Value Factor

2.17762 [SYS 061300] 2.177624 - Target

 WBS No:
 1EEC01
 Rocky Flats Closure Project
 Project
 Baseline Devl

 Activity ID:
 1EEC1000
 Baseline Cost and Basis of Estimate
 WBS Filter
 1EEC

750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C104S	Closure Management	Linear	27.53 Hours
Factors	35 Hours		0.36123 May Earned Value Factor				
						2.17762 [SYS 06130	01 2.177624 - Target
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C104S	Closure Management	Linear	86.53 Hours
Factors	110 Hours		0.36123 May Earned Value Factor				
						2.17762 [SYS 06130	01 2.177624 - Target
Λ 5 Ш	SLIBCONTRACTED SRVS	0000	NONE	C1049	Closuro Managoment	Lipoar	4 706 95 Dollars

Factors 26 Weeks 225 Dollars per Week 1.02283 -- FY00 Escalation -- 0.36123 May Earned Value Factor

Line Item 881HR003 - Project Engineering

BOE

Estimators Experience - Estimate was developed by B.881 Facility Manager with over 20 years experience deactivating and decommissioning nuclear facilities, including the past five years at RFETS as the Maintenance Manager and Facility Manager.

Experience Item Desc - Project Engineering support for Hazards Reduction activities.

Breakdown of Cost Data:

Item - Project Engineering support
Units - 1)Hours

Unit Cost - 1)100

Unit Cost Adjustment factor - None

Revised Unit Cost - None Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

rces	Cost Element		Skill		Department	Curve	Ouantity	Units
	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C104S	Closure Management	Linear	78.66	Hours

Factors 100 Hours 0.36123 May Earned Value Factor

2.17762 [SYS 061300] 2.177624 - Target

2.17762 [SYS 061300] 2.177624 - Target

2.17762 [SYS 061300] 2.177624 - Target

Starts In FY

Line Item 881HR005 - Develop Health/Safety/Emer. Plan

BOE

Estimators Experience - Estimate was developed by B.881 Facility Manager with over 20 years experience deactivating and decommissioning nuclear facilities, including the past five years at RFETS as the Maintenance Manager and Facility Manager.

Experience Item Desc - Develolp Health, Safety, Emergency Plans

Breakdown of Cost Data:

Item - Develop Health, Safety, Emergency Plans

Units - 1)Hours 2)Dollars

Unit Cost - 1)650 2)5,500

Unit Cost Adjustment factor - None

Revised Unit Cost - N/A

Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s	Cost Element		Skill		Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C104S	Closure Management	Linear	55.06	Hours
	Factors 70 Hours		0.36123 May Earned Value Factor					
_						2.17762 [SYS 061300	01 2.177624 - Ta	arget
Ĺ	750 STRAIGHT TIME BASE	P050	COMPLIANCE INSPECTORS	C104S	Closure Management	Linear	275.32	Hours
	Factors 350 Hours		0.36123 May Earned Value Factor					
_						2.17762 [SYS 061300	01 2.177624 - Ta	arget
Ĺ	750 STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	C104S	Closure Management	Linear	78.66	Hours
	Factors 100 Hours		0.36123 May Earned Value Factor					
_						2.17762 [SYS 061300	01 2.177624 - Ta	arget
Ĺ	750 STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C104S	Closure Management	Linear	78.66	Hours
	Factors 100 Hours		0.36123 May Earned Value Factor					

Line Item 881HR006 - Collect & Develop CDPH&E Data

BOE

Estimators Experience - Estimate was developed by B.881 Facility Manager with over 20 years experience deactivating and decommissioning nuclear facilities, including the past five years at RFETS as the Maintenance Manager and Facility Manager.

Experience Item Desc - Collection & Development of CDPH&E Data

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WBS No: 1EEC01 **Rocky Flats Closure Project** 1EEC1000 Activity ID: **Baseline Cost and Basis of Estimate**

Baseline Devl Proiect 1EEC WBS Filter Activity Filter

Starts In FY

Breakdown of Cost Data: Item - Collection of Data for CDPH&E Units - 1)Hours 2)Dollars Unit Cost - 1)489 2)3,222.22 Unit Cost Adjustment factor - None Revised Unit Cost - N/A Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

S	Cost Element		SKIII	Department	Curve	Quantity Units
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C104S Closure Management	Linear	117.99 Hours
Facto	rs 150 Hours		0.36123 May Earned Value Factor			
					2.17762 [SYS 06130	01 2.177624 - Target
750	STRAIGHT TIME BASE	P050	COMPLIANCE INSPECTORS	C104S Closure Management	Linear	129.01 Hours
Facto	rs 164 Hours		0.36123 May Earned Value Factor			
					2.17762 [SYS 06130	0] 2.177624 - Target
750	STRAIGHT TIME BASE	P050	COMPLIANCE INSPECTORS	C104S Closure Management	2.17762 [SYS 06130 Linear	0] 2.177624 - Target 137.66 Hours
750		P050	COMPLIANCE INSPECTORS 0.36123 May Earned Value Factor	C104S Closure Management		
		P050		C104S Closure Management		137.66 Hours
Facto				C104S Closure Management C104S Closure Management	Linear	137.66 Hours

Factors 3222.22 Dollars 1.02283 -- FY00 Escalation --0.36123 May Earned Value Factor

2.17762 [SYS 061300] 2.177624 - Target

Line Item SYS - Contingency And Escalation

BOE

Resources

es		Cost Element		Skill		Department	Curve	Ouantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	268.33	Dollars
	Factors	268.334 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	189.16	Dollars

Factors 189.159 Dollars

Activity ID: 1EE	C1001 Description: 881 Cluster Stab/Hazards R	emoval FY)1					Cost Risk	2 Schedule R	isk 2		
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
881HR001	HR Proiect Execution Plan	1.00	each	EE	178	178	9.507	18.511	0	28.018	4.384	32.402
881HR002	HR Work Procedures	1.00	each	EE	249	249	9.679	5.321	0	15.000	4.463	19.463
881HR005	Develop Health/Safety/Emer. Plan	1.00	each	EE	551	551	16.530	0	0	16.530	7.622	24.152
881HR006	Collect & Develop CDPH&E Data	1.00	each	EE	435	435	16.281	2.931	0	19.212	7.508	26.720
881PerRelo1EM	B.881 Personnel Relocation	1.00	each	HC	0	0	0	34.344	0	34.344	0	34.344
881PropLab-1EM	Laboratory Property Removal	1.00	each	HC	0	0	0	30.217	0	30.217	0	30.217
881PropLI-1EMB0	Light Industrial Area Property Removal	1.00	each	HC	0	0	0	2.486.709	0	2.486.709	0	2.486.709
881PropT2B-1EM	Type II Industrial w/Both	1.00	each	HC	0	0	0	1.782.206	0	1.782.206	0	1.782.206
881PropT2H-1EM	Type II Industrial w/Heavy Mach.	1.00	each	HC	0	0	0	1.284.846	0	1.284.846	0	1.284.846
881PropT2T-1EM	Type II Industrial w/Tanks	1.00	each	HC	0	0	0	1.492.079	0	1.492.079	0	1.492.079
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	454.746	454.746	0	454.746
	Tot	al for Activi	ty 1EEC100	1:		1.413	51.997	7.137.165	454.746	7.643.909	23.977	7.667.886

Line Item 881HR001 - HR Project Execution Plan

BOE

Estimators Experience - Estimate was developed by B.881 Facility Manager with over 20 years experience deactivating and decommissioning nuclear facilities, including the past five years at RFETS as the Maintenance Manager and Facility Manager. Experience Item Desc - Project Execution Plan Initiation and Development

Breakdown of Cost Data: Item - PEP Development Units - 1) Hours 2) Dollars Unit Cost - 1)200 2)20,350 Unit Cost Adjustment factor - None Revised Unit Cost - N/A Basis for adjustment - N/A

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WBS No: 1EEC01 Activity ID: 1EEC1001

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1EEC

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions. Cost Executive Cost Executive Cost	ctivity ID:	1EEC1001	Baseline Co	st and Basis of Estimate	WBS Filter 1EEC Activity Filter *	Starts In FY *
Total STRAIGHT TIME BASE		This estimate includes a project p	productivity/efficiency factor for	committed but as yet undefine	ed cost reductions.	
Factor 25 Hours Too STRAIGHTTIME BASE	Resources	Cost Element	Skill	Department	Curve	Ouantity Units
TSO STRAIGHTTIME BASE MOZO MANAGERS (GRADE 69-72) C104S Closure Management Linear 155.60Ho		750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C104S Closure Management	Linear	22.23 Hours
To STRAIGHTTME BASE		Factors 25 Hours			0.00004 10000	04.4001.0000.4000
Factor 175 Hours		750 STRAIGHT TIME RASE	MO20 MANAGERS (GRADE 60, 72)	C104S Closure Management		
ASH SUBCONTRACTED SRYS P180 TECHNICAL WRITERS AND EDITOR C1045 Closure Management Unear 5.23(1.30) Factor 26 weeks 225 Dollars per Week 1.02283 — FY00 Escalation O.88934 ISYS 0614001 .88934200 - Sys			1 WOZO IWANAGERS IGRADE 03 - 12)	C1043 Closule Management	Lilledi	155.051110018
ASH SUBCONTRACTED SRVS P160 TECHNICAL WRITERS AND EDITOR C1045 Closure Management Linear 5.321.45 Do		Taciors 170 Hours			0.88934 [SYS.0	614001 88934200 - System
ASH SUBCONTRACTED SRVS P160 TECHNICAL WRITERS AND EDITOR C104S Closure Management Linear 13.188.8610 Return 14500 Dollars 1.02283 - FY00 Escalation - 0.88934 [SYS 061400] .88934200 - Syz Relation		A5H SUBCONTRACTED SRVS	P160 TECHNICAL WRITERS AND EDI	TOR C104S Closure Management		5.321.43 Dollars
ASH SUBCONTRACTED SRVS P160 TECHNICAL WRITERS AND EDITOR C104S Closure Management Linear 13.188.86 Dot Rows 14500 Dollars 1.02283 - FY00 Escalation 0.88934 [SYS 061400] .88934200 - Sve stems 891HR002 - HR Work Procedures OE Stimators Experience - Stimate was developed by B.881 Facility Manager with over 20 years experience deactivating and decommissioning nuclear fating including the past five years at FFFT as the Maintenance Manager and Facility Manager. Experience Tem Desc - HR Work Procedure Development Experience Tem Desc - HR Work Procedure Productivity/Efficiency Factor For committed but as yet undefined cost reductions. Experience Tem Desc - Develop Health Safety Emergency Plans Unit Cost - 1/650 215,500 Unit Cost - 1/6		Factors 26 weeks	225 Dollars per Week	1.02283 FY00 Esca	lation	
ellem881HR002 - HR Work Procedures 30E 80E 80E 80E 80E 80E 80E 80E					0.88934 [SYS 0	614001 .88934200 - Svstem
Section Sect		A5H SUBCONTRACTED SRVS		TOR C104S Closure Management	Linear	13.189.86 Dollars
Star Ball HR002 - HR Work Procedures		Factors 14500 Dollars	1.02283 FY00 Escalation			
Retimators Experience - Estimate was developed by B.881 Facility Manager with over 20 years experience deactivating and decommissioning nuclear fall including the past five years at RPETS as the Maintenance Manager and Facility Manager. Retimators Experience Tem Deac - HR Work Procedure					0.88934 [SYS 0	61400] .88934200 - System
including the past five years at RFRTS as the Maintenance Manager and Pacility Manager. Reperience Item Desc - HR MONK Procedure Breakdown of Cost Data: Item - Work Procedures Unit Cost - 1/280 2/7,000 Unit Cost - 3/280 2/7,000 Unit Cost - 3/280 2/7,000 Unit Cost - Mills Cost - N/A Basis for adjustment factor - None Revised Unit Cost - N/A Basis for adjustment - N/A This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions. Cost Element Sill Denument Denument Lunear 57.81 Ho Factors 65 Hours 750 STRAIGHT TIME BASE MO20 MANAGERS (GRADE 69-72) C104S Closure Management Lunear 57.81 Ho Factors 65 Hours 0.88934 [SYS 061400].88934200 - Sve 750 STRAIGHT TIME BASE P170 OTHER ADMINISTRATIVE & PROFE C104S Closure Management Lunear 57.81 Ho Factors 150 Hours 0.88934 [SYS 061400].88934200 - Sve A5H SUBCONTRACTED SRVS 0.000 NONE C104S Closure Management Lunear 57.81 Ho Factors 26 Weeks 25 Dollars per Week 1.02283 - FY00 Escalation OR Bestimators Experience - Bestimate was developed by B.881 Facility Manager with over 20 years experience deactivating and decommissioning nuclear for Including the past five years at RFTS as the Maintenance Manager and Facility Manager. Reperience Item Description of the Professional Paragraphy Plans Unit Cost - 1/650 2/5,500 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.	ltem 8811					
Resources Cost Element Skill Department Curve Onumity		Unit Cost - 1)280 2)7,000 Unit Cost Adjustment factor - Non Revised Unit Cost - N/A	ae			
T50 STRAIGHT TIME BASE M020 MANAGERS (GRADE 69 - 72) C104S Closure Management Linear 57.81 Ho Factors 65 Hours		This estimate includes a project p	oroductivity/efficiency factor for	committed but as yet undefine	d cost reductions.	
Factors 65 Hours	Resources					
T50 STRAIGHT TIME BASE M020 MANAGERS (GRADE 69 - 72) C104S Closure Management Linear 57.81Hc Factors 65 Hours T50 STRAIGHT TIME BASE P170 OTHER ADMINISTRATIVE & PROFE C104S Closure Management Linear 133.40Hc Factors 150 Hours A5H SUBCONTRACTED SRVS 0000 NONE C104S Closure Management Linear 5.321.43Do Factors 26 Weeks 225 Dollars per Week 1.02283 FY00 Escalation Be Hern 881HR005 - Develop Health/Safety/Emer. Plan C104S Closure Management Linear 5.321.43Do C104S Closure Management Linear 133.40Hc C104S Closure Management Linear 133.4			M020 MANAGERS (GRADE 69 - 72)	C104S Closure Management	Linear	57.81 Hours
TSO STRAIGHTIME BASE MO20 MANAGERS (GRADE 69 - 72) C104S Closure Management Linear 57.81 Hospital Factors 65 Hours TSO STRAIGHTIME BASE P170 OTHER ADMINISTRATIVE & PROFE C104S Closure Management Linear 133.40 Hospital		Factors 65 Hours			0.88934 ISYS 0	614001 88934200 - System
750 STRAIGHT TIME BASE P170 OTHER ADMINISTRATIVE & PROFE C104S Closure Management Linear 133.40 Hors A5H SUBCONTRACTED SRVS 0000 NONE C104S Closure Management Linear 5.321.43 Do Factors 26 Weeks 225 Dollars per Week 1.02283 FY00 Escalation 0.88934 [SYS 061400] .88934200 - Svs Clem 881HR005 - Develop Health/Safety/Emer. Plan Bote Estimators Experience - Estimate was developed by B.881 Facility Manager with over 20 years experience deactivating and decommissioning nuclear faincluding the past five years at RFETS as the Maintenance Manager and Facility Manager. Experience Item Desc - Develop Health, Safety, Emergency Plans Breakdown of Cost Data: Item - Develop Health, Safety, Emergency Plans Unit Cost - 1)650 2)5,500 Unit Cost Adjustment factor - None Revised Unit Cost - N/A Basis for adjustment - N/A This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.		750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C104S Closure Management		57.81 Hours
To Straight Time Base P170 Other Administrative & PROFE C104S Closure Management Linear 133.40 Hore Factors 150 Hours O.88934 [SYS 061400] .88934200 - Sys Linear 5.321.43 Dot Factors 26 Weeks 225 Dollars per Week 1.02283 FY00 Escalation OE Estimators Experience - Estimate was developed by B.881 Facility Manager with over 20 years experience deactivating and decommissioning nuclear faction including the past five years at RFETS as the Maintenance Manager and Facility Manager. Experience Item Desc - Develop Health, Safety, Emergency Plans Breakdown of Cost Data: Item - Develop Health, Safety, Emergency Plans Units - 1) Hours 2) Dollars Units - 1) Hours 2) Dollars Unit Cost Adjustment factor - None Revised Unit Cost - N/A Basis for adjustment - N/A This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.		Factors 65 Hours				_
A5H SUBCONTRACTED SRVS 0000 NONE C104S Closure Management Linear 5.321.43 Do Factors 26 Weeks 225 Dollars per Week 1.02283 FY00 Escalation 0.88934 [SYS 061400] .88934200 - Svs 0.88934 [SYS 0		750 OTDAIOLIT TIME DAGE	DAZO OTHER ADMINISTRATIVE & DR	OFF 04040 Ol M		
A5H SUBCONTRACTED SRVS 0000 NONE C104S Closure Management Linear 5.321.43 Do Factors 26 Weeks 225 Dollars per Week 1.02283 FY00 Escalation Be Item 881HR005 - Develop Health/Safety/Emer. Plan Estimators Experience - Estimate was developed by B.881 Facility Manager with over 20 years experience deactivating and decommissioning nuclear faincluding the past five years at RFETS as the Maintenance Manager and Facility Manager. Experience Item Desc - Develop Health, Safety, Emergency Plans Breakdown of Cost Data: Item - Develop Health, Safety, Emergency Plans Units - 1)Hours 2)Dollars Unit Cost - 1)650 2)5,500 Unit Cost Adjustment factor - None Revised Unit Cost - N/A Basis for adjustment - N/A This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.			1 P1/0 IOTHER ADMINISTRATIVE & PRI	OFE C1045 Closure Management	Linear	133.40Inouis
A5H SUBCONTRACTED SRVS 0000 NONE C104S Closure Management Linear 5.321.43 Do Factors 26 Weeks 225 Dollars per Week 1.02283 FY00 Escalation 0.88934 [SYS 061400] .88934200 - Svs Faltem 881HR005 - Develop Health/Safety/Emer. Plan Estimators Experience - Estimate was developed by B.881 Facility Manager with over 20 years experience deactivating and decommissioning nuclear falincluding the past five years at RFETS as the Maintenance Manager and Facility Manager. Experience Item Desc - Develop Health, Safety, Emergency Plans Breakdown of Cost Data: Item - Develop Health, Safety, Emergency Plans Units - 1)Hours 2)Dollars Unit Cost - 1)650 2)5,500 Unit Cost Adjustment factor - None Revised Unit Cost - N/A Basis for adjustment - N/A This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.		raciois 130 Hours			0.88934 ISYS 0	614001 88934200 - System
Factors 26 Weeks 225 Dollars per Week 1.02283 FY00 Escalation 0.88934 [SYS 061400] .88934200 - Sve Estimators Experience - Estimate was developed by B.881 Facility Manager with over 20 years experience deactivating and decommissioning nuclear facincluding the past five years at RFETS as the Maintenance Manager and Facility Manager. Experience Item Desc - Develop Health, Safety, Emergency Plans Breakdown of Cost Data: Item - Develop Health, Safety, Emergency Plans Units - 1) Hours 2) Dollars Unit Cost - 1) 650 2) 5, 500 Unit Cost Adjustment factor - None Revised Unit Cost - N/A Basis for adjustment - N/A This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.		A5H SUBCONTRACTED SRVS	0000 NONE	C104S Closure Management		5.321.43 Dollars
Estimators Experience - Estimate was developed by B.881 Facility Manager with over 20 years experience deactivating and decommissioning nuclear faincluding the past five years at RFETS as the Maintenance Manager and Facility Manager. Experience Item Desc - Develolp Health, Safety, Emergency Plans Breakdown of Cost Data: Item - Develop Health, Safety, Emergency Plans Units - 1)Hours 2)Dollars Unit Cost - 1)650 2)5,500 Unit Cost Adjustment factor - None Revised Unit Cost - N/A Basis for adjustment - N/A This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.					lation	
Estimators Experience - Estimate was developed by B.881 Facility Manager with over 20 years experience deactivating and decommissioning nuclear faincluding the past five years at RFETS as the Maintenance Manager and Facility Manager. Experience Item Desc - Develolp Health, Safety, Emergency Plans Breakdown of Cost Data: Item - Develop Health, Safety, Emergency Plans Units - 1)Hours 2)Dollars Unit Cost - 1)650 2)5,500 Unit Cost Adjustment factor - None Revised Unit Cost - N/A Basis for adjustment - N/A This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.					0.88934 [SYS 0	61400] .88934200 - System
including the past five years at RFETS as the Maintenance Manager and Facility Manager. Experience Item Desc - Develolp Health, Safety, Emergency Plans Breakdown of Cost Data: Item - Develop Health, Safety, Emergency Plans Units - 1)Hours 2)Dollars Unit Cost - 1)650 2)5,500 Unit Cost Adjustment factor - None Revised Unit Cost - N/A Basis for adjustment - N/A This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.	tem 881i :					
	3OE	including the past five years at R Experience Item Desc - Develolp He Breakdown of Cost Data: Item - Develop Health, Safety, Emer Units - 1)Hours 2)Dollars Unit Cost - 1)650 2)5,500 Unit Cost Adjustment factor - Non Revised Unit Cost - N/A	FFETS as the Maintenance Manager ar ealth,Safety,Emergency Plans gency Plans	nager with over 20 years exper nd Facility Manager.	ience deactivating and decommiss	sioning nuclear facilities
Resources Cost Element Skill Department Curve Quantity		This estimate includes a project p	productivity/efficiency factor for	committed but as yet undefine	ed cost reductions.	
too around the transfer that the transfer that the transfer transfer the transfer tr	Resources	Cost Element	Skill	Department	Curve	Quantity Units

1EEC01 Baseline Devl Proiect **Rocky Flats Closure Project** Activity ID: 1EEC1001 WBS Filter 1EEC **Baseline Cost and Basis of Estimate** Activity Filter Starts In FY 750 STRAIGHT TIME BASE M020 MANAGERS (GRADE 69 - 72) C104S Closure Management 62.25 Hours Linear Factors 70 Hours 0.88934 [SYS 061400] .88934200 - System P050 COMPLIANCE INSPECTORS C103S Environmental Compliance 311.27 Hours 750 STRAIGHT TIME BASE Linear 350 Factors Hours 0.88934 [SYS 061400] .88934200 - System P080 HEALTH PHYSICISTS C104S Closure Management 88.93 Hours STRAIGHT TIME BASE Linear 100 Hours Factors 0.88934 [SYS 061400] .88934200 - System 750 STRAIGHT TIME BASE P170 OTHER ADMINISTRATIVE & PROFE | C104S | Closure Management 88.93 Hours 100 Hours Factors 0.88934 [SYS 061400] .88934200 - System Line Item 881HR006 - Collect & Develop CDPH&E Data Estimators Experience - Estimate was developed by B.881 Facility Manager with over 20 years experience deactivating and decommissioning nuclear facilities, including the past five years at RFETS as the Maintenance Manager and Facility Manager. Experience Item Desc - Collection & Development of CDPH&E Data Breakdown of Cost Data: Item - Collection of Data for CDPH&E Units - 1) Hours 2) Dollars Unit Cost - 1)489 2)3,222.22 Unit Cost Adjustment factor - None Revised Unit Cost - N/A Basis for adjustment - N/A This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions. Resources Cost Element Skill Department Curve **Ouantity** Units E120 SAFETY ENGINEERS 750 STRAIGHT TIME BASE C104S Closure Management Linear 155.63 Hours **Factors** 175 Hours 0.88934 [SYS 061400] .88934200 - System 750 STRAIGHT TIME BASE M020 MANAGERS (GRADE 69 - 72) C104S Closure Management 133.40 Hours Linear **Factors** 150 Hours 0.88934 [SYS 061400] .88934200 - System 750 STRAIGHT TIME BASE P050 COMPLIANCE INSPECTORS C103S Environmental Compliance Linear 145.85 Hours 164 **Factors** Hours 0.88934 [SYS 061400] .88934200 - System A5H SUBCONTRACTED SRVS 0000 NONE C104S Closure Management 2.931.08 Dollars Linear Factors 3222.22 Dollars 1.02283 -- FY00 Escalation --0.88934 [SYS 061400] .88934200 - System Line Item 881PerRelo.-1EMB0170 - B.881 Personnel Relocation Historical Data Source - Cost Estimate Derived From "Personnel Relocation Planning Template." Item Desc - Personnel Relocation Costs Breakdown of Historical Data: Item - Personnel Relocation Units - 1)Dollars Unit Cost - 1)38,046.80 Unit Cost Adjustment factor - None Revised Unit Cost - None Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions. Resourc

rces		Cost Element		Skill			Department	Curve	Ouantity	Units	ı
	A5R	MISC EXPENSES	0000	NONE	C104S	Closure Ma	anagement	Linear	34.344.17	Dollars	ı
	г.	400.05 Delless see Desses		00 DI-		4.045	EV(00 EI-ti				

Factors 432.35 Dollars per Person 1 015 -- FY00 Escalation --People

Line Item 881PropLab-1EMB01902 - Laboratory Property Removal

WBS No:

BOE

BOE

Historical Data Source - Cost Estimate Derived From "Disposal Cost Model for Type I and Type II Buildings Template." BOE

0.88934 [SYS 061400] .88934200 - System

Rockv Flats Closure Proiect
Baseline Cost and Basis of Estimate

WBS Filter 1EEC
Activity Filter *

Baseline Devl

Proiect

Starts In FY

Item Desc - Property Disposition Cost Model
Breakdown of Historical Data:
Item - Property Disposition
Units - 1)Dollars
Unit Cost - 1)33,475
Unit Cost Adjustment factor - None
Revised Unit Cost - None
Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

WBS No:

Activity ID:

1EEC01

1EEC1001

es		Cost Element		Skill		Department	Curve	Quantity	Units
	A5H	SUBCONTRACTED SRVS	0000	NONE	C104S	Closure Management	Linear	30.217.28	Dollars

Factors 325 Pieces of Equipment in Laboratory 103 Dollars per Item (Average) 1.015 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - System

Line Item 881PropLI-1EMB019025 - Light Industrial Area Property Removal

BOE

Historical Data Source - Cost Estimate Derived From "Disposal Cost Model for Type I and Type II Buildings Template."

Item Desc - Property Removal Costs for Light Industrial Areas

Breakdown of Historical Data:

Item - Property Removal Costs

Units - 1)Dollars

Unit Cost - 1)2,754,800

Unit Cost Adjustment factor - None

Revised Unit Cost - None

Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

rces		Cost Element	Skill	Department	Curve	Quantity	Units
	A5H S	SUBCONTRACTED SRVS	0000 NONE	C104S Closure Management	Linear	2,486,709.00	Dollars

Factors 27548 Items 100 Dollars per Item (Average) 1.015 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - System

Line Item 881PropT2B-1EMB01902 - Type II Industrial w/Both

Basis for adjustment - N/A

BOE

Historical Data Source - Cost Estimate Derived From "Disposal Cost Model for Type I and Type II Buildings Template."

Item Desc - Property Removal Costs from Type II Industrial Buildings with Heavy Machinery and Tanks

Breakdown of Historical Data:

Item - Property Removal Costs

Units - 1)Dollars

Unit Cost - 1)1,974,345

Unit Cost Adjustment factor - None

Revised Unit Cost - None

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es		Cost Element		Skill		Department	Curve	(Ouantity	Units
	A5H	SUBCONTRACTED SRVS	0000 N	IONE	C104S	Closure Management	Linear		782.206.00	Oollars

Factors 9183 Items 215 Dollars per Item (Average) 1.015 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - System

Line Item 881PropT2H-1EMB01902 - Type II Industrial w/Heavy Mach.

BOE

Historical Data Source - Cost Estimate Derived From "Disposal Cost Model for Type I and Type II Buildings Template."

Item Desc - Type II Industrial Areas with Heavy Machinery

Breakdown of Historical Data:

Item - Property Disposition in Type II Areas

Units - 1)Dollars

Unit Cost - 1)1,423,365

Unit Cost Adjustment factor - None

Revised Unit Cost - None

Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Rocky Flats Closure Project

Baseline Cost and Basis of Estimate

WBS Fill

WBS Fill

Baseline Cost and Basis of Estimate

WBS Filter 1EEC
Activity Filter *

Resources	Cost Element	Skill	Department	Curve	Quantity Units
	A5H SUBCONTRACTED SRVS	0000 NONE	C104S Closure Management	Linear	1.284.846.00 Dollars
	Factors 9183 Items	155 Dollars per Item	1.015 FY00 Escalation		

Line Item 881PropT2T-1EMB01902 - Type II Industrial w/Tanks

0.88934 [SYS 061400] .88934200 - System

0.88934 [SYS 061400] .88934200 - System

Starts In FY

Baseline Devl

BOE

WBS No:

Activity ID:

Historical Data Source - Cost Estimate Derived From "Disposal Cost Model for Type I and Type II Buildings Template."

Item Desc - Property Disposition costs from Type II Industrial Areas w/Tanks

Breakdown of Historical Data:

Item - Property Disposition costs

Units - 1)Dollars

1EEC01

1EEC1001

Unit Cost - 1)1,652,940

Unit Cost Adjustment factor - None

Revised Unit Cost - None Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es		C	Cost Element			Skill			Department	Curve	Ouantity	Units
	A5H	SUBCONT	RACTED SRVS	0000	NONE		C104S	Closure	Management	Linear	1.492.079.00	Dollars
	Factors	9183	Items	•	180	Dollars per Item (Average)		1.015	FY00 Escalation			Ÿ

Line Item SYS - Contingency And Escalation

BOE

Resources

es		Cost Element		Skill		Department	Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	279.356.80	Dollars
_	Factors	279357 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	175.389.40	Dollars

Factors 175389 Dollars

Activity ID: 1EEC1002 Description: 881 Cluster Stab/Hazards Removal FY03 Cost Risk 2 Schedule Risk 2

Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
881HIBAPEN	Planning & Engineering	1.00	each	EE	0	0	0	74.471	0	74.471	0	74.471
881HIBCHAR	Characterization	1.00	each	EE	0	0	0	255,910	0	255,910	0	255,910
881HIBCSPR	Site Preparation	1.00	each	EE	0	0	0	54,161	0	54,161	0	54,161
881HIBDPYA	Physical Activities	1.00	each	EE	0	0	0	1,026,350	0	1,026,350	0	1,026,350
881HIBEPMG	Project Management	1.00	each	EE	0	0	0	219,352	0	219,352	0	219,352
881HIBFSUS	Suport Services	1.00	each	EE	0	0	0	201,749	0	201,749	0	201,749
881HR001	HR Project Execution Plan	1.00	each	EE	178	178	9,507	18,511	0	28,018	3,356	31,374
881HR002	HR Work Procedures	1.00	each	EE	249	249	9,978	5,321	0	15,299	3,522	18,821
881HR005	Develop Health/Safety/Emer. Plan	1.00	each	EE	551	551	16,530	0	0	16,530	5,835	22,365
881HR006	Collect & Develop CDPH&E Data	1.00	each	EE	435	435	16,281	2,931	0	19,212	5,747	24,960
881LABAPEN-1E	Planning & Engineering	1.00	each	EE	0	0	0	30.466	0	30.466	0	30.466
881LABBCHR-1E	Characterization	1.00	each	EE	0	0	0	106.291	0	106.291	0	106.291
881LABCSPR-1E	Site Preparation	1.00	each	EE	0	0	0	22.341	0	22.341	0	22.341
881LABDPYA-1E	Physical Activities	1.00	each	EE	0	0	0	425.840	0	425.840	0	425.840
881LABEPMG-1E	Project Management	1.00	each	EE	0	0	0	91.397	0	91.397	0	91.397
881LABFSUS-1E	Support Services	1.00	each	EE	0	0	0	83.949	0	83.949	0	83.949
SYS	Contingency And Escalation	1.00) ea	EE	0	0	0	0	406.168	406.168	0	406.168
	Tot	al for Activ	ity 1EEC100	2:		1.413	52.296	2.619.041	406.168	3.077.505	18.460	3.095.965

Line Item 881HIBAPEN - Planning & Engineering

BOE

Estimators Experience - Estimate is based on Hazards Reduction/Stabilization template prepared by the Kaiser-Hill PCI organization.

Experience Item Desc - Planning & Engineering Heavy Industrial Building

Breakdown of Cost Data:

Item - Planning & Engineering Heavy Industrial Building

Units - 1)Dollars

WBS No: 1EEC01 Activity ID: 1EEC1002

Rocky Flats Closure Project Baseline Cost and Basis of Estimate Proiect WBS Filter Activity Filter

Baseline Devl

1EEC

Starts In FY

Unit Cost - 1)82,500 Unit Cost Adjustment factor - None Revised Unit Cost - None Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resource

ces		Cost Element		Skill	Department	Curve	Ouantity	Units
	A5R	MISC EXPENSES	0000	NONE C104S	Closure Management	Linear	74.471.27	Dollars

0.55 Dollars per Square Foot 150000 Square Feet 1.015 -- FY00 Escalation --Factors

Line Item 881HIBCHAR - Characterization

0.88934 [SYS 061400] .88934200 - System

BOE

Estimators Experience - Estimate is based on Hazards Reduction/Stabilization template prepared by the Kaiser-Hill PCI organization. Experience Item Desc - Characterization Heavy Industrial Buildings Breakdown of Cost Data:

Item - Characterization of Heavy Industrial Buildings Units - 1)Dollars

Unit Cost - 1)283,500

Unit Cost Adjustment factor - None Revised Unit Cost - None

Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resource

BOE

rces	Cos	t Element		Skill		Department	Си	ırve	Ouantity	Units
	A5R MISC EXPE	NSES 00	000 NONE	C104S	S Clos	sure Management	Lin	ear	255.910.40	Dollars

1.89 Dollars per Square Foot 150000 Square Feet 1.015 -- FY00 Escalation --Factors

Line Item 881HIBCSPR - Site Preparation

0.88934 [SYS 061400] .88934200 - System

Experience Item Desc - Plannint & Engineering Site Preparation Breakdown of Cost Data: Item - Planning & Engineering Site Preparation

Units - 1)Dollars Unit Cost - 1)60,000

Unit Cost Adjustment factor - None Revised Unit Cost - None Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resource

ces		Cost Element		Skill		Department	Curve	Quantity	Units
	A5R	MISC EXPENSES	0000	NONE	C104S	Closure Management	Linear	54.160.93	Dollars

0.4 Dollars per Square Foot 150000 Square Feet 1.015 -- FY00 Escalation --Factors

Line Item 881HIBDPYA - Physical Activities

0.88934 [SYS 061400] .88934200 - System

BOE

Estimators Experience - Estimate is based on Hazards Reduction/Stabilization template prepared by the Kaiser-Hill PCI organization. Experience Item Desc - Physical Activities Heavy Industrial Building

Estimators Experience - Estimate is based on Hazards Reduction/Stabilization template prepared by the Kaiser-Hill PCI organization.

Breakdown of Cost Data:

Item - 1) Physical Activities Heavy Industrial Building

Units - 1)Dollars

Unit Cost - 1)1,137,000

Unit Cost Adjustment factor - None

Revised Unit Cost - None

Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Units Resources Skill Cost Element Department Curve

WBS No: 1EEC01 Baseline Devl Proiect **Rocky Flats Closure Project** Activity ID: 1EEC1002 WBS Filter 1EEC **Baseline Cost and Basis of Estimate**

Activity Filter Starts In FY C104S Closure Management A5R MISC EXPENSES 0000 NONE 1.026.350.00 Dollars Linear

Factors 7.58 Dollars per Square Foot 150000 Square Feet 1.015 -- FY00 Escalation --

Line Item 881HIBEPMG - Project Management

Estimators Experience - Estimate is based on Hazards Reduction/Stabilization template prepared by the Kaiser-Hill PCI organization.

Experience Item Desc - Project Management Heavy Industrial Buildings

Breakdown of Cost Data:

Item - Project Management Heavy Industrial Buildings

Units - 1)Dollars

Unit Cost - 1)243,000

Unit Cost Adjustment factor - None

Revised Unit Cost - None Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resource

BOE

rces		Cost Element		Skill		Department	C	Curve	Ouantity	Units
	A5R	MISC EXPENSES	0000	NONE	C104S	Closure Management	L	inear	219.351.8	30 Dollars

1 62 Dollars per Square Foot 150000 Square Feet 1 015 -- FY00 Escalation --Factors

Line Item 881HIBFSUS - Suport Services

Estimators Experience - Estimate is based on Hazards Reduction/Stabilization template prepared by the Kaiser-Hill PCI organization. BOE

Experience Item Desc - Support Services Heavy Industrial Building

Breakdown of Cost Data:

Item - 1) Support Services Heavy Industrial Building

Units - 1)Dollars

Unit Cost - 1)223,500

Unit Cost Adjustment factor - None

Revised Unit Cost - None

Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resour

urces	Cost Element	Skill	Department	Curve	Quantity Units
	A5R MISC EXPENSES	0000 NONE	C104S Closure Management	Linear	201.749.50 Dollars

1.49 Dollars per Square Foot 150000 Square Feet 1.015 -- FY00 Escalation --Factors

Line Item 881HR001 - HR Project Execution Plan

BOE

Estimators Experience - Estimate was developed by B.881 Facility Manager with over 20 years experience deactivating and decommissioning nuclear facilities, including the past five years at RFETS as the Maintenance Manager and Facility Manager.

Experience Item Desc - Project Execution Plan Initiation and Development

Breakdown of Cost Data:

Item - PEP Development

Units - 1) Hours 2) Dollars Unit Cost - 1)200 2)20,350

Unit Cost Adjustment factor - None

Revised Unit Cost - N/A

Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es		Cost Element	Skill	Department	Curve	Ouantity Units
	750	STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C104S Closure Management	Linear	22.23 Hours

Factors 25 Hours

						0.88934 [SYS 06140	01 .88934200 - Svstem
	750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C104S Closure Management	Linear	155.63 Hours
_							

Factors 175 Hours 0.88934 [SYS 061400] .88934200 - System

WBS No: 1EEC01 Proiect Baseline Devl **Rocky Flats Closure Project** Activity ID: 1EEC1002 WBS Filter 1EEC **Baseline Cost and Basis of Estimate** Activity Filter A5H SUBCONTRACTED SRVS P160 TECHNICAL WRITERS AND EDITOR C104S Closure Management Linear Factors 26 weeks Dollars per Week 1.02283 -- FY00 Escalation --0.88934 [SYS 061400] .88934200 - System

P160 TECHNICAL WRITERS AND EDITOR C104S Closure Management

14500 Dollars 1.02283 -- FY00 Escalation --Factors

Line Item 881HR002 - HR Work Procedures

SUBCONTRACTED SRVS

0.88934 [SYS 061400] .88934200 - System

Starts In FY

0.88934 [SYS 061400] .88934200 - System

5.321.43 Dollars

13.189.86 Dollars

BOE

A5H

Estimators Experience - Estimate was developed by B.881 Facility Manager with over 20 years experience deactivating and decommissioning nuclear facilities, including the past five years at RFETS as the Maintenance Manager and Facility Manager.

Experience Item Desc - HR Work Procedure Development

Breakdown of Cost Data: Item - Work Procedures Units - 1) Hours 2) Dollars Unit Cost - 1)280 2)7,000 Unit Cost Adjustment factor - None Revised Unit Cost - N/A Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es			Cost Element		Skill		Department	Curve	Ouantity	Units
	750	STRAIGH	IT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C104S	Closure Management	Linear	57.81	Hours
	Factors	65	Hours							
								0.88934 [SYS 061400	01 .88934200 - \$	System
	750	STRAIGH	IT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C104S	Closure Management	Linear	57.81	Hours
	Factors	65	Hours							
,								0.88934 [SYS 061400	01 .88934200 - \$	System
	750	STRAIGH	IT TIME BASE	P070	COST ESTIMATORS PLANNERS AN	C104S	Closure Management	Linear	133.40	Hours
	Factors	150	Hours							
								0.00034 [CVC 061400	1 00024200	System

A5H SUBCONTRACTED SRVS 0000 NONE C104S Closure Management 5.321.43 Dollars Linear

Factors 26 Weeks 225 Dollars per Week 1.02283 -- FY00 Escalation --

Line Item 881HR005 - Develop Health/Safety/Emer. Plan

BOE

Estimators Experience - Estimate was developed by B.881 Facility Manager with over 20 years experience deactivating and decommissioning nuclear facilities, including the past five years at RFETS as the Maintenance Manager and Facility Manager.

Experience Item Desc - Develolp Health, Safety, Emergency Plans

Breakdown of Cost Data:

Item - Develop Health, Safety, Emergency Plans

Units - 1) Hours 2) Dollars

Unit Cost - 1)650 2)5,500 Unit Cost Adjustment factor - None

Revised Unit Cost - N/A

Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

8		Cost Element		Skill		Department	Curve	<i>Ouantity</i>	Units
	750 STRA	JIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C104S	Closure Management	Linear	62.25	Hours
	Factors 70	Hours							
							0.88934 [SYS 061400	01 .88934200 - S	vstem
	750 STRA	JIGHT TIME BASE	P050	COMPLIANCE INSPECTORS	C104S	Closure Management	Linear	311.27	Hours
	Factors 35	0 Hours							
_			0.88934 [SYS 061400].88934200 - Svst						vstem
	750 STRA	IGHT TIME BASE	P080	HEALTH PHYSICISTS	C104S	Closure Management	Linear	88.93	Hours
	Factors 10	0 Hours							
							0.88934 [SYS 061400	01 .88934200 - S	vstem

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Baseline Devl Proiect **Rocky Flats Closure Project** WBS Filter 1EEC **Baseline Cost and Basis of Estimate**

Activity Filter Starts In FY 750 STRAIGHT TIME BASE P170 OTHER ADMINISTRATIVE & PROFE | C104S | Closure Management 88.93 Hours Linear

Factors 100 Hours

0.88934 [SYS 061400] .88934200 - System

0.00004 [0.00.004.000] 0.0004.000

0.88934 [SYS 061400] .88934200 - System

Line Item 881HR006 - Collect & Develop CDPH&E Data

1EEC01

1EEC1002

Estimators Experience - Estimate was developed by B.881 Facility Manager with over 20 years experience deactivating and decommissioning nuclear facilities, including the past five years at RFETS as the Maintenance Manager and Facility Manager.

Experience Item Desc - Collection & Development of CDPH&E Data

Breakdown of Cost Data:

Item - Collection of Data for CDPH&E Units - 1) Hours 2) Dollars Unit Cost - 1)489 2)3,222.22

Unit Cost Adjustment factor - None

Revised Unit Cost - N/A

Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resource

WBS No:

Activity ID:

rces	Cost Element	Skill	Department	Curve	Ouantity Units
	750 STRAIGHT TIME BASE	E120 SAFETY ENGINEERS	C104S Closure Management	Linear	155.63 Hours

Factors 175 Hours

						0.88934 [SYS 06140	01 .88934200 - Svstem
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C104S	Closure Management	Linear	133.40 Hours

150 Factors Hours

						0.00934 1515 00140	101 .00934200 - SVStern
750	STRAIGHT TIME BASE	P050	COMPLIANCE INSPECTORS	C104S	Closure Management	Linear	145.85 Hours

Factors 164 Hours

						0.88934	ISYS 061400	01 .88934200 - 8	Svstem
A5H	SUBCONTRACTED SRVS	0000	NONE	C104S	Closure Management	Line		2.931.08	Dollars

3222.22 Dollars Factors

1.02283 -- FY00 Escalation --

Line Item 881LABAPEN-1E0088102 - Planning & Engineering

Estimators Experience - Estimate is based on Hazards Reduction/Stabilization template prepared by the Kaiser-Hill PCI organization.

Experience Item Desc - Planning & Engineering Laboratories

Breakdown of Cost Data:

Item - Planning & Engineering Laboratories

Units - 1)Dollars

Unit Cost - 1)33,750

Unit Cost Adjustment factor - None

Revised Unit Cost - None

Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resource

BOE

rces	Cost Element	Skill	Department	Curve	Ouantity	Units
	A5R MISC EXPENSES	0000 NONE	C104S Closure Management	Linear	30.465.52	Dollars

Factors 0.45 Dollars per Square Foot 75000 Square Feet 1.015 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - System

Line Item 881LABBCHR-1E0088102 - Characterization

BOE

Estimators Experience - Estimate is based on Hazards Reduction/Stabilization template prepared by the Kaiser-Hill PCI organization. Experience Item Desc - Characterization of Laboratories

Breakdown of Cost Data:

Item - Characterization of Laboratories

Units - 1)Dollars

Unit Cost - 1)117,750

Unit Cost Adjustment factor - None

Revised Unit Cost - None

Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

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Proiect Baseline Devl **Rocky Flats Closure Project** WBS Filter 1EEC **Baseline Cost and Basis of Estimate**

Activity Filter Skill Department Curve

C104S Closure Management

1.015 -- FY00 Escalation --1.57 Dollars per Square Foot 75000 Square Feet

0000 NONE

Line Item 881LABCSPR-1E0088102 - Site Preparation

A5R MISC EXPENSES

Linear

Starts In FY

0.88934 [SYS 061400] .88934200 - System

0.88934 [SYS 061400] .88934200 - System

106.290.80 Dollars

Hnit

Estimators Experience - Estimate is based on Hazards Reduction/Stabilization template prepared by the Kaiser-Hill PCI organization. Experience Item Desc - Site Preparation for Laboratories

Breakdown of Cost Data:

Item - Site Preparation for Laboratories

Units - 1)Dollars

Unit Cost - 1)24,750

Unit Cost Adjustment factor - None

Cost Element

Revised Unit Cost - None

Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

1EEC01

1EEC1002

Units Cost Element Department Ouantity A5R MISC EXPENSES 0000 NONE C104S Closure Management Linear 22.341.38 Dollars

0.33 Dollars per Square Foot 75000 Square Feet 1.015 -- FY00 Escalation --

Line Item 881LABDPYA-1E0088102 - Physical Activities

Estimators Experience - Estimate is based on Hazards Reduction/Stabilization template prepared by the Kaiser-Hill PCI organization.

Experience Item Desc - Physical Activities for Laboratories

Breakdown of Cost Data:

Item - Physical Activities for Laboratories

Units - 1)Dollars

Unit Cost - 1)471,750

Unit Cost Adjustment factor - None

Revised Unit Cost - None Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resource

BOE

BOE

WBS No:

Activity ID:

BOE

Resources

ırces	Cost Element	Skill	Department	Curve	Ouantity	Units
	A5R MISC EXPENSES	0000 NONE	C104S Closure Management	Linear	425.840.30 E	Oollars

Dollars per Square Foot Square Feet -- FY00 Escalation --Factors 6.29 1.015

0.88934 [SYS 061400] .88934200 - System

Line Item 881LABEPMG-1E0088102 - Project Management

Estimators Experience - Estimate is based on Hazards Reduction/Stabilization template prepared by the Kaiser-Hill PCI organization.

Experience Item Desc - Project Management for Laboratories

Breakdown of Cost Data:

Item - Project Management for Laboratories

Units - 1)Dollars

Unit Cost - 1)101,250

Unit Cost Adjustment factor - None

Revised Unit Cost - None

Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resource

rces	Cost Element	Skill	Department	Curve	Quantity	Units	
	A5R MISC EXPENSES	0000 NONE	C104S Closure Management	Linear	91 396 56	Dollars	

Factors 1.35 Dollars per Square Foot 75000 Square Feet 1 015 -- FY00 Escalation --

Line Item 881LABFSUS-1E0088102 - Support Services

0.88934 [SYS 061400] .88934200 - System

Estimators Experience - Estimate is based on Hazards Reduction/Stabilization template prepared by the Kaiser-Hill PCI organization. BOE Experience Item Desc - Support Services for Laboratories

Breakdown of Cost Data:

Item - Support Services for Laboratories

Proiect **Rocky Flats Closure Project** WBS Filter **Baseline Cost and Basis of Estimate**

1EEC1002 Activity Filter Units - 1)Dollars Unit Cost - 1)93,000

Unit Cost Adjustment factor - None Revised Unit Cost - None Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Skill Units Cost Element Department Curve A5R MISC EXPENSES 0000 NONE C104S Closure Management Linear 83.949.44 Dollars

Dollars per Square Foot Square Feet -- FY00 Escalation --Factors 1.24 75000 1.015

Line Item SYS - Contingency And Escalation

1EEC01

BOE

WBS No:

Activity ID:

Resources

es		Cost Element		Skill		Department	Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	280.469.50	Dollars
	Factors	280470 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	125 608 10	Dollare

125698 Dollars

WBS No: 1EEC	13 Title: 883 Cluster Stabilization/H	azaro Remi	ovai									
Activity ID: 1EE	C3001 Description: B883 Uranium D-238 Remov	val Operatio	ns					Cost Risk	4 Schedule R	isk 4		
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
883HIBAPEN	Planning & Engineering	1.00	each	EE	0	0	0	19.859	0	19.859	0	19.859
883HIBBCHR	Characterization	1.00	each	EE	0	0	0	68.243	0	68.243	0	68.243
883HIBCSPR	Site Preparation	1.00	each	EE	0	0	0	14.443	0	14.443	0	14.443
883HIBDPYA	Physical Activities	1.00	each	EE	0	0	0	273.693	0	273.693	0	273.693
883HIBEPMG	Proiect Management	1.00	each	EE	0	0	0	58.494	0	58.494	0	58.494
883HIBFSUS	Support Services	1.00	each	EE	0	0	0	53.800	0	53.800	0	53.800
NPMCWM0200	Strategy/Methodology	1.00	ea	HC	27	27	1.054	502	0	1.556	366	1.922
NPMCWM0201	Procurement	1.00	ea	HC	0	0	0	8.187	0	8.187	0	8.187
NPMCWM0202	Engineering Design Package	1.00	ea	HC	249	249	8.338	250	0	8.588	2.897	11.485
NPMCWM0203	Authorization Basis	1.00	ea	HC	78	78	2.553	1.505	0	4.058	887	4.945
NPMCWM0204	Remove Sludge/Debris	1.00	ea	HC	413	413	9.320	0	0	9.320	3.239	12.558
NPMCWM0205	Rinse Operations	1.00	ea	HC	213	213	4.516	6.428	0	10.944	1.569	12.513
NPMCWM0206	Close Secondary Containment	1.00	ea	HC	43	43	885	3.346	0	4.231	308	4.539
NPMCWM0207	Drain & Isolate	1.00	ea	HC	178	178	3.844	0	0	3.844	1.336	5.179
NPMCWM0208	Closure Certification	1.00	ea	HC	36	36	1.901	9.027	0	10.928	661	11.589
NPMCWM0210	Final Building Operations	1.00	ea	HC	64	64	1.327	0	0	1.327	461	1.789
NPMCWM0211	Engineering Documentation	1.00	ea	HC	14	14	487	45.191	0	45.678	169	45.847
NPMCWM1000	Survey and Pack Drums	1.00	ea	HC	8.284	8.284	192.671	606.401	0	799.072	66.954	866.026
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	350.428	350.428	0	350.428
	Tot	al for Activit	v 1EEC3001	:		9.598	226.895	1.169.369	350.428	1.746.693	78.847	1.825.540

Line Item 883HIBAPEN - Planning & Engineering

BOE

Estimators Experience - Estimate is based on Hazards Reduction/Stabilization template prepared by the Kaiser-Hill PCI organization.

Experience Item Desc - Planning & Engineering for Contaminaeted Area Breakdown of Cost Data:

Item - Planning & Engineering for Contaminated Area

Units - 1)Dollars Unit Cost - 1)22,000

Unit Cost Adjustment factor - None

Revised Unit Cost - None Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

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Baseline Devl

Starts In FY

0.88934 [SYS 061400] .88934200 - System

1EEC

Rocky Flats Closure Project Project Baseline Devl

Baseline Cost and Basis of Estimate

WBS Filter
Activity Filter

*

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	A5R MISC EXPENSES	0000 NONE	C104S Closure Management	Linear	19.859.01	Dollars

Factors 0.55 Dollars per Square Foot 40000 Square Feet 1.015 -- FY00 Escalation --

Line Item 883HIBBCHR - Characterization

1EEC03

1EEC3001

Estimators Experience - Estimate is based on Hazards Reduction/Stabilization template prepared by the Kaiser-Hill PCI organization.

Experience Item Desc - Characterization for Contaminated Area

Breakdown of Cost Data:

Item - Characterization for Contaminate Area

Units - 1)Dollars

Unit Cost - 1)75,600

Unit Cost Adjustment factor - None

Revised Unit Cost - None

Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

BOE

WBS No:

Activity ID:

BOE

rces		Cost Element		Skill	Departi	ment	Curve	Ouantity	Units	
	A5R	MISC EXPENSES	0000	NONE	C104S Closure Manageme	ent	Linear	68.242.77	Dollars	

Factors 1.89 Dollars per Square Foot 40000 Square Feet 1.015 -- FY00 Escalation --

Line Item 883HIBCSPR - Site Preparation

Estimators Experience - Estimate is based on Hazards Reduction/Stabilization template prepared by the Kaiser-Hill PCI organization.

Experience Item Desc - Site Preparation for Contaminated Areas

Breakdown of Cost Data:

Item - Site Preparation for Contaminated Areas

Units - 1)Dollars

Unit Cost - 1)16,000

Unit Cost Adjustment factor - None

Revised Unit Cost - None Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

BOE

ırces	Cost Element	Skill	Department	Curve	<i>Ouantity</i>	Units
	A5R MISC EXPENSES	0000 NONE	C104S Closure Management	Linear	14.442.91	Dollars

Factors 0.4 Dollars per Square Foot 40000 Square Feet 1.015 -- FY00 Escalation --

Line Item 883HIBDPYA - Physical Activities

Estimators Experience - Estimate is based on Hazards Reduction/Stabilization template prepared by the Kaiser-Hill PCI organization.

Experience Item Desc - Physical Activities for Contaminated Area

Breakdown of Cost Data:

Item - Physical Activities for Contaminated Area

Units - 1)Dollars

Unit Cost - 1)303,200

Unit Cost Adjustment factor - None

Revised Unit Cost - None

Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resource

BOE

rces		Cost Element		Skill		Department	Curve	Quantity	Units
	A5R	MISC EXPENSES	0000	NONE	C104S	Closure Management	Linear	273.693.20	Dollars

Factors 7.58 Dollars per Square Foot 40000 Square Feet 1.015 -- FY00 Escalation --

Line Item 883HIBEPMG - Project Management

Estimators Experience - Estimate is based on Hazards Reduction/Stabilization template prepared by the Kaiser-Hill PCI organization.

Experience Item Desc - Project Management for Contaminated Area

Breakdown of Cost Data:

Item - Project Management for Contaminated Area

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Starts In FY

0.88934 [SYS 061400] .88934200 - System

WBS No: 1EEC03
Activity ID: 1EEC3001

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter 1EEC Activity Filter *

Starts In FY

Units - 1)Dollars Unit Cost - 1) 64,800 Unit Cost Adjustment factor - None Revised Unit Cost - None Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es		Cost Element		Skill		Department	Curve	Ouantity	Units
	A5R	MISC EXPENSES	0000	NONE	C104S	Closure Management	Linear	58.493.80	Dollars

Factors 1.62 Dollars per Square Foot 40000 Square Feet 1.015 -- FY00 Escalation --

Line Item 883HIBFSUS - Support Services

0.88934 [SYS 061400] .88934200 - System

BOE

Estimators Experience - Estimate is based on Hazards Reduction/Stabilization template prepared by the Kaiser-Hill PCI organization.

Experience Item Desc - Support Services for Contaminated Area

Breakdown of Cost Data:

Item - Support Services for Contaminated Area

Units - 1)Dollars

Unit Cost - 1)59,600

Unit Cost Adjustment factor - None

Revised Unit Cost - None

Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

ces		Cost Element		Skill		Department	Curve	Ouantity	Units	
	A5R	MISC EXPENSES	0000	NONE	C104S	Closure Management	Linear	53.799.86	Dollars	

Factors 1.49 Dollars per Square Foot 40000 Square Feet 1.015 -- FY00 Escalation --

Line Item NPMCWM0200 - Strategy/Methodology

0.88934 [SYS 061400] .88934200 - System

BOE

Line Title: Strategy/Methodology Primary Driver(s): The estimate is comprised of the following computations: Cost Center R3008 (Skill Code M030 Program Manager): Straight time: (10 hr)(36.12) = \$361.2Cost Center I0383 (Skill Code E080Nuclear Engineers): Straight time: (4 hr)(27.82) = \$111.28Cost Center I3168 (Skill Code P080 Health Physicists): Straight time: (4 hr)(25.72) = \$102.88Cost Center S3143 (Skill Code P090 Industrial Hygienists) Straight time: (4 hr)(26.49) = \$105.96Cost Center R0237 (Skill Code P170 Other Administrative and Professional Occupations): Straight time: (4 hr)(23.68) = \$94.72Cost Center I0379 (Skill Code P170 Other Administrative and Professional Occupations): Straight time: (4 hr)(23.68) = \$94.72Subcontract Services A5H Cost Center L3175 (Skill Code P170 Other Administrative and Professional Occupations): Straight time: (12 hr)(46) = \$552Total Activity: \$1422.76 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

ces			Cost Element		Skill		Department	Curve	Ouantity	Units
	750	STRAIGH	HT TIME BASE	E080	NUCLEAR (CRITICALITY) ENGINEER	K249S	Nuclear Safety & Licensing	Linear	3.56	Hours
	Factors	4	Hours							

0.88934 [SYS 061400] .88934200 - System

WBS No: 1EEC03 Baseline Devl Proiect Rocky Flats Closure Project 1EEC3001 1EEC Activity ID: WBS Filter **Baseline Cost and Basis of Estimate** Activity Filter Starts In FY 750 STRAIGHT TIME BASE M020 MANAGERS (GRADE 69 - 72) C104S Closure Management 8.89 Hours Linear Factors 10 Hours 0.88934 [SYS 061400] .88934200 - System 750 STRAIGHT TIME BASE P080 HEALTH PHYSICISTS C101S Health & Safety 3.56 Hours Linear 4 Hours Factors 0.88934 [SYS 061400] .88934200 - System 750 STRAIGHT TIME BASE P090 INDUSTRIAL HYGIENISTS C101S Health & Safety 3.56 Hours Linear Factors 4 Hours 0.88934 [SYS 061400] .88934200 - System STRAIGHT TIME BASE P170 OTHER ADMINISTRATIVE & PROFE | C103S | Environmental Compliance Linear 3.56 Hours 4 Hours **Factors** 0.88934 [SYS 061400] .88934200 - System P170 OTHER ADMINISTRATIVE & PROFE | C104S | Closure Management 750 STRAIGHT TIME BASE Linear 3.56 Hours Factors Hours 0.88934 [SYS 061400] .88934200 - System 0000 NONE C104S Closure Management 502.12 Dollars A5H SUBCONTRACTED SRVS Linear 1.02283 -- FY00 Escalation --Factors 552 Dollars 0.88934 [SYS 061400] .88934200 - System Line Item NPMCWM0201 - Procurement Line Title: Procurement BOE Cost Center: L3195 The estimate is comprised of the following computations: A5C115 Air mover \$6000 A5C115 Miscellaneous \$2000 A5C115 Portable band saw \$1000 Total Activity: \$9000 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions. Curve. Units Resources Cost Element Department **Ouantity** A5H SUBCONTRACTED SRVS 0000 NONE C106S Business Management Office Linear 8.186.81 Dollars Factors 9000 Dollars 1.02283 -- FY00 Escalation --0.88934 [SYS 061400] .88934200 - System Line Item NPMCWM0202 - Engineering Design Package Line Title: Engineering Design Package BOE Primary Driver(s): The estimate is comprised of the following computations: Cost Center L3184 (Skill Code E130 Other Engineers): Straight time: (240 hr)(30.03) = \$7,207.20Cost Center I3051 (Skill Code E110 Quality Control Engineers): Straight time: (8 hr)(26.49) = \$211.92Cost Center L3184 (Skill Code P170 Other Professionals): Straight time: (8 hr)(23.68) = \$189.44Cost Center I3168 (Skill Code P080 Health Physicist): Straight time: (8 hr)(25.72) = \$205.76Cost Center S3143 (Skill Code P090 Industrial Hygienist): Straight time: (8 hr)(26.49) = \$211.92Cost Center I0274 (Skill Code P170 Other Professionals): Straight time: (16 hr)(23.68) = \$378.88Total Activity: \$3600.32

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Units

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Cost Element

Resources

vity ID:	1EEC03 1EEC3001		Closure Project nd Basis of Estimate	Proiect WBS Filter	Baseline Devl 1EEC		
	750 STRAIGHT TIME BASE	E130 OTHER ENGINEERS	C105S Work Control Center	Activity Filter	Lincor	Starts In FY 213.44	Llouro
	Factors 240 Hours	E130 OTHER ENGINEERS	C 105S WORK CONTROL CENTER		Linear	213.44	HOUIS
	racions 240 Hours				0.88934 [SYS 0614	.001 88934200 - S	System
	750 STRAIGHT TIME BASE	P080 HEALTH PHYSICISTS	C101S Health & Safety		Linear		Hours
	Factors 8 Hours						
					0.88934 [SYS 0614		
	750 STRAIGHT TIME BASE	P090 INDUSTRIAL HYGIENISTS	C101S Health & Safetv		Linear	7.11	Hours
	Factors 8 Hours						
	750 OTDAIOLIT TIME DAGE	DATO OTHER ADMINISTRATIVE & DROFE	04040 01 M		0.88934 ISYS 0614		
	750 STRAIGHT TIME BASE Factors 8 Hours	P170 OTHER ADMINISTRATIVE & PROFE	C104S Closure Management		Linear	7.11	Hours
	Factors 8 Hours				0.88934 [SYS 0614	001 88034300 8	Systom
	750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C104S Closure Management		U.88934 1313 0014	14.23	
	Factors 16 Hours	1 1 170 IOTHER ADMINISTRATIVE OF INOI E	1 O 1040 TOTOSATE MANAGEMENT		Linear	17.20	ilouis
	10 1104.0				0.88934 [SYS 0614	001 .88934200 - S	System
	A5H SUBCONTRACTED SRVS	E110 QUALITY CONTROL ENGINEERS	C105S Work Control Center		Linear	250.12	
	Factors 274.96 Prime Dollars	1.02283 FY00 Escalation					
					0.88934 [SYS 0614	001 .88934200 - S	System
tem NP	PMCWM0203 - Authorization Basis						
OE	Line Title: Authorization Basis						
	Primary Driver(s): The estimate is comprised of the	following computations:					
	Straight time: (8 hr)(26.49) = Cost Center L3184 (Skill Code P1	70 Other Professionals):					
	Straight time: (8 hr)(26.49) = Cost Center L3184 (Skill Code P Straight time: (16 hr)(23.68) = Cost Center I3168 (Skill Code F Straight time: (8 hr)(25.72) = Cost Center S3143 (Skill Code F Straight time: (8 hr)(26.49) = Cost Center I0379 (Skill Code F Straight time: (8 hr)(23.68) = Cost Center I3081 (Skill Code F Straight time: (16 hr)(30.03) = Cost Center S3172 (Skill Code F Straight time: (16 hr)(30.03) = Cost Center S3172 (Skill Code F Straight time: (32 hr)(30.03) =	\$211.92 70 Other Professionals): \$378.88 8080 Health Physicist): \$205.76 8090 Industrial Hygienist): \$211.92 170 Other Professionals): \$189.44 1330 Other Engineers - SES/USQD): \$480.48 1330 Other Engineers - ORC):					
	Straight time: (8 hr)(26.49) = Cost Center L3184 (Skill Code PI Straight time: (16 hr)(23.68) = Cost Center I3168 (Skill Code F Straight time: (8 hr)(25.72) = Cost Center S3143 (Skill Code F Straight time: (8 hr)(26.49) = Cost Center I0379 (Skill Code F Straight time: (8 hr)(23.68) = Cost Center I3081 (Skill Code F Straight time: (16 hr)(30.03) = Cost Center S3172 (Skill Code F	\$211.92 70 Other Professionals): \$378.88 8080 Health Physicist): \$205.76 8090 Industrial Hygienist): \$211.92 170 Other Professionals): \$189.44 1330 Other Engineers - SES/USQD): \$480.48 1330 Other Engineers - ORC): \$960.96					
	Straight time: (8 hr)(26.49) = Cost Center L3184 (Skill Code PI Straight time: (16 hr)(23.68) = Cost Center I3168 (Skill Code FI Straight time: (8 hr)(25.72) = Cost Center S3143 (Skill Code FI Straight time: (8 hr)(26.49) = Cost Center I0379 (Skill Code FI Straight time: (8 hr)(23.68) = Cost Center I3081 (Skill Code FI Straight time: (16 hr)(30.03) = Cost Center I3081 (Skill Code FI Straight time: (32 hr)(30.03) = Straight time: (32 hr)(30.03) = Straight time: (32 hr)(30.03) = Straight time: (30 hours)(46) = Total Activity: \$4019.36	\$211.92 70 Other Professionals): \$378.88 8080 Health Physicist): \$205.76 8090 Industrial Hygienist): \$211.92 170 Other Professionals): \$189.44 1330 Other Engineers - SES/USQD): \$480.48 1330 Other Engineers - ORC): \$960.96					
	Straight time: (8 hr)(26.49) = Cost Center L3184 (Skill Code PI Straight time: (16 hr)(23.68) = Cost Center I3168 (Skill Code FI Straight time: (8 hr)(25.72) = Cost Center S3143 (Skill Code FI Straight time: (8 hr)(26.49) = Cost Center I0379 (Skill Code FI Straight time: (8 hr)(23.68) = Cost Center I3081 (Skill Code FI Straight time: (16 hr)(30.03) = Cost Center I3081 (Skill Code FI Straight time: (32 hr)(30.03) = Straight time: (32 hr)(30.03) = Straight time: (32 hr)(30.03) = Straight time: (30 hours)(46) = Total Activity: \$4019.36	\$211.92 70 Other Professionals): \$378.88 8080 Health Physicist): \$205.76 8090 Industrial Hygienist): \$211.92 170 Other Professionals): \$189.44 1330 Other Engineers - SES/USQD): \$480.48 1330 Other Engineers - ORC): \$960.96	mitted but as yet undefined	cost reductio	ns.		
esource	Straight time: (8 hr)(26.49) = Cost Center L3184 (Skill Code P) Straight time: (16 hr)(23.68) = Cost Center I3168 (Skill Code F) Straight time: (8 hr)(25.72) = Cost Center S3143 (Skill Code F) Straight time: (8 hr)(26.49) = Cost Center I0379 (Skill Code F) Straight time: (8 hr)(23.68) = Cost Center I3081 (Skill Code F) Straight time: (16 hr)(30.03) = Cost Center S3172 (Skill Code F) Straight time: (32 hr)(30.03) = Subcontract services: A5H Cost Center L3195 (Skill code P) Straight time: (30 hours)(46) = Total Activity: \$4019.36	\$211.92 70 Other Professionals): \$378.88 080 Health Physicist): \$205.76 090 Industrial Hygienist): \$211.92 170 Other Professionals): \$189.44 130 Other Engineers - SES/USQD): \$480.48 130 Other Engineers - ORC): \$960.96 70 Planners/Schedulers): \$1380.00 productivity/efficiency factor for communications	Department	cost reduction	ons .	Quantity	Units
esources	Straight time: (8 hr)(26.49) = Cost Center L3184 (Skill Code P) Straight time: (16 hr)(23.68) = Cost Center I3168 (Skill Code F) Straight time: (8 hr)(25.72) = Cost Center S3143 (Skill Code F) Straight time: (8 hr)(26.49) = Cost Center I0379 (Skill Code F) Straight time: (8 hr)(23.68) = Cost Center I3081 (Skill Code F) Straight time: (16 hr)(30.03) = Cost Center S3172 (Skill Code F) Straight time: (32 hr)(30.03) = Subcontract services: A5H Cost Center L3195 (Skill code P) Straight time: (30 hours)(46) = Total Activity: \$4019.36	\$211.92 70 Other Professionals): \$378.88 8080 Health Physicist): \$205.76 8090 Industrial Hygienist): \$211.92 8170 Other Professionals): \$189.44 8130 Other Engineers - SES/USQD): \$480.48 8130 Other Engineers - ORC): \$960.96		. cost reductio		Ouantity 14.23	
esources	Straight time: (8 hr)(26.49) = Cost Center L3184 (Skill Code PI Straight time: (16 hr)(23.68) = Cost Center I3168 (Skill Code FI Straight time: (8 hr)(25.72) = Cost Center S3143 (Skill Code FI Straight time: (8 hr)(26.49) = Cost Center I0379 (Skill Code FI Straight time: (8 hr)(23.68) = Cost Center I3081 (Skill Code FI Straight time: (16 hr)(30.03) = Cost Center S3172 (Skill Code FI Straight time: (32 hr)(30.03) = Straight time: (32 hr)(30.03) = Subcontract services: A5H Cost Center L3195 (Skill code FI Straight time: (30 hours)(46) = Total Activity: \$4019.36 This estimate includes a project	\$211.92 70 Other Professionals): \$378.88 080 Health Physicist): \$205.76 090 Industrial Hygienist): \$211.92 170 Other Professionals): \$189.44 130 Other Engineers - SES/USQD): \$480.48 130 Other Engineers - ORC): \$960.96 70 Planners/Schedulers): \$1380.00 productivity/efficiency factor for communications	Department	cost reductio	Curve Linear	14.23	Hours
esource:	Straight time: (8 hr)(26.49) = Cost Center L3184 (Skill Code P) Straight time: (16 hr)(23.68) = Cost Center I3168 (Skill Code F) Straight time: (8 hr)(25.72) = Cost Center S3143 (Skill Code F) Straight time: (8 hr)(26.49) = Cost Center I0379 (Skill Code F) Straight time: (8 hr)(23.68) = Cost Center I3081 (Skill Code F) Straight time: (16 hr)(30.03) = Cost Center I3081 (Skill Code F) Straight time: (32 hr)(30.03) = Subcontract services: A5H Cost Center L3195 (Skill code F) Straight time: (30 hours)(46) = Total Activity: \$4019.36 This estimate includes a project S Cost Element T50 STRAIGHT TIME BASE Factors 16 Hours	\$211.92 70 Other Professionals): \$378.88 980 Health Physicist): \$205.76 990 Industrial Hygienist): \$211.92 170 Other Professionals): \$189.44 1330 Other Engineers - SES/USQD): \$480.48 1330 Other Engineers - ORC): \$960.96 70 Planners/Schedulers): \$1380.00 productivity/efficiency factor for communications of the second of t	C105S Work Control Center	cost reductio	Curve Linear 0.88934 [SYS 0614	14.23 001 .88934200 - Ş	Hours System
esources	Straight time: (8 hr)(26.49) = Cost Center L3184 (Skill Code PI Straight time: (16 hr)(23.68) = Cost Center I3168 (Skill Code FI Straight time: (8 hr)(25.72) = Cost Center S3143 (Skill Code FI Straight time: (8 hr)(26.49) = Cost Center I0379 (Skill Code FI Straight time: (8 hr)(23.68) = Cost Center I3081 (Skill Code FI Straight time: (16 hr)(30.03) = Cost Center S3172 (Skill Code FI Straight time: (32 hr)(30.03) = Subcontract services: A5HI Cost Center L3195 (Skill code FI Straight time: (30 hours)(46) = Total Activity: \$4019.36 This estimate includes a project **Cost Element** T50 STRAIGHT TIME BASE	\$211.92 70 Other Professionals): \$378.88 080 Health Physicist): \$205.76 090 Industrial Hygienist): \$211.92 170 Other Professionals): \$189.44 130 Other Engineers - SES/USQD): \$480.48 130 Other Engineers - ORC): \$960.96 70 Planners/Schedulers): \$1380.00 productivity/efficiency factor for communications	Department	.cost reductio	Curve Linear	14.23 001 .88934200 - Ş	Hours
esources	Straight time: (8 hr)(26.49) = Cost Center L3184 (Skill Code P) Straight time: (16 hr)(23.68) = Cost Center I3168 (Skill Code F) Straight time: (8 hr)(25.72) = Cost Center S3143 (Skill Code F) Straight time: (8 hr)(26.49) = Cost Center I0379 (Skill Code F) Straight time: (8 hr)(23.68) = Cost Center I3081 (Skill Code F) Straight time: (16 hr)(30.03) = Straight time: (16 hr)(30.03) = Straight time: (32 hr)(30.03) = Subcontract services: A5H Cost Center L3195 (Skill code F) Straight time: (30 hours)(46) = Total Activity: \$4019.36 This estimate includes a project STRAIGHTTIME BASE Factors 16 Hours 750 STRAIGHTTIME BASE	\$211.92 70 Other Professionals): \$378.88 980 Health Physicist): \$205.76 990 Industrial Hygienist): \$211.92 170 Other Professionals): \$189.44 1330 Other Engineers - SES/USQD): \$480.48 1330 Other Engineers - ORC): \$960.96 70 Planners/Schedulers): \$1380.00 productivity/efficiency factor for communications of the second of t	C105S Work Control Center	cost reduction	Curve Linear 0.88934 ISYS 0614 Linear	14.23 001 .88934200 - S 7.11	Hours System Hours
esources	Straight time: (8 hr)(26.49) = Cost Center L3184 (Skill Code P) Straight time: (16 hr)(23.68) = Cost Center I3168 (Skill Code F) Straight time: (8 hr)(25.72) = Cost Center S3143 (Skill Code F) Straight time: (8 hr)(26.49) = Cost Center I0379 (Skill Code F) Straight time: (8 hr)(23.68) = Cost Center I3081 (Skill Code F) Straight time: (16 hr)(30.03) = Straight time: (16 hr)(30.03) = Straight time: (32 hr)(30.03) = Subcontract services: A5H Cost Center L3195 (Skill code F) Straight time: (30 hours)(46) = Total Activity: \$4019.36 This estimate includes a project STRAIGHTTIME BASE Factors 16 Hours 750 STRAIGHTTIME BASE	\$211.92 70 Other Professionals): \$378.88 980 Health Physicist): \$205.76 990 Industrial Hygienist): \$211.92 170 Other Professionals): \$189.44 1330 Other Engineers - SES/USQD): \$480.48 1330 Other Engineers - ORC): \$960.96 70 Planners/Schedulers): \$1380.00 productivity/efficiency factor for communications of the second of t	C105S Work Control Center	. cost reductio	Curve Linear 0.88934 [SYS 0614	14.23 001 .88934200 - S 7.11	Hours System Hours System

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Foto	0 1 FV
Factors B Hours Hours	Starts In FY * 7.11 Hours
Total Straight Time BASE P090 INDUSTRIAL HYGIENISTS C101S Health & Safety Line Factors 8 Hours 0.88934	7.11mouis
Factors 8	SYS 0614001 .88934200 - Svstem
1,50 STRAIGHTTIME BASE	ar 7.11 Hours
ASH SUBCONTRACTED SRVS	SYS 0614001 .88934200 - Svstem
ASH SUBCONTRACTED SRVS 0000 NONE	ar 14.23 Hours
ASH SUBCONTRACTED SRVS	SYS 0614001 .88934200 - Svstem
ASH SUBCONTRACTED SRVS	
ASH SUBCONTRACTED SRVS	SYS 0614001 .88934200 - Svstem
### A Prime Dollars ### 1.02283 - PY00 Escalation Output	
OSE NPMCWM0204 - Remove Sludge/Debris	ESV. I EIDSIIGIO
Dime Title: Remove Sludge/Debris	SYS 0614001 .88934200 - System
Primary Driver(s):	
Straight time: (160 hr)(19,32) = \$3091.20	
T50 STRAIGHT TIME BASE C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers Line. Factors 160 Hours 0.88934 T50 STRAIGHT TIME BASE C120 D&D SKILLED TRADES KE10H Indust/Site Srvs Steelworkers Line. Factors 160 Hours 0.88934 T50 STRAIGHT TIME BASE C120 D&D SKILLED TRADES KE10H Indust/Site Srvs Steelworkers Line. Factors 80 Hours 0.88934 T50 STRAIGHT TIME BASE M010 FOREMEN / TEAM LEADS / GROUP C104S Closure Management Line. Factors 24 Hours 0.88934 T50 STRAIGHT TIME BASE P090 INDUSTRIAL HYGIENISTS C101S Health & Safety Line. Factors 40 Hours	
750 STRAIGHT TIME BASE C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers Line. Factors 160 Hours 0.88934 750 STRAIGHT TIME BASE C120 D&D SKILLED TRADES KE10H Indust/Site Srvs Steelworkers Line. Factors 160 Hours 0.88934 750 STRAIGHT TIME BASE C120 D&D SKILLED TRADES KE10H Indust/Site Srvs Steelworkers Line. Factors 80 Hours 0.88934 750 STRAIGHT TIME BASE M010 FOREMEN / TEAM LEADS / GROUP C104S Closure Management Line. Factors 24 Hours 0.88934 750 STRAIGHT TIME BASE P090 INDUSTRIAL HYGIENISTS C101S Health & Safety Line. Factors 40 Hours	e Quantity Units
Tactors 160 Hours 0.88934	
T50 STRAIGHT TIME BASE C120 D&D SKILLED TRADES KE10H Indust/Site Srvs Steelworkers Lines	SYS 061400] .88934200 - System
Tool STRAIGHT TIME BASE C120 D&D SKILLED TRADES KE10H Indust/Site Srvs Steelworkers Lines	
750 STRAIGHT TIME BASE C120 D&D SKILLED TRADES KE10H Indust/Site Srvs Steelworkers Lines Factors 80 Hours 0.88934 750 STRAIGHT TIME BASE M010 FOREMEN / TEAM LEADS / GROUP C104S Closure Management Lines Factors 24 Hours 0.88934 750 STRAIGHT TIME BASE P090 INDUSTRIAL HYGIENISTS C101S Health & Safety Lines Factors 40 Hours	SYS 061400] .88934200 - System
Factors 80 Hours 750 STRAIGHT TIME BASE M010 FOREMEN / TEAM LEADS / GROUP C104S Closure Management Lines Factors 24 Hours 0.88934 750 STRAIGHT TIME BASE P090 INDUSTRIAL HYGIENISTS C101S Health & Safety Lines Factors 40 Hours	
750 STRAIGHT TIME BASE M010 FOREMEN / TEAM LEADS / GROUP C104S Closure Management Lines Factors 24 Hours 0.88934 750 STRAIGHT TIME BASE P090 INDUSTRIAL HYGIENISTS C101S Health & Safety Lines Factors 40 Hours	SYS 0614001 .88934200 - Svstem
Factors 24 Hours 0.88934 750 STRAIGHT TIME BASE P090 INDUSTRIAL HYGIENISTS C101S Health & Safety Lines Factors 40 Hours	
750 STRAIGHT TIME BASE P090 INDUSTRIAL HYGIENISTS C101S Health & Safety Lines Factors 40 Hours	
Factors 40 Hours	SYS 0614001 .88934200 - System ar 35.57lHours
0.88934	
Item NPMCWM0205 - Rinse Operations	SYS 061400] .88934200 - System
OE Line Title: Rinse Operations	-
Primary Driver(s): The estimate is comprised of the following computations:	
Cost Center I4264 (Skill Code C120 Exp Oper):	

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WBS No: 1EEC03 Rockv Flats Closure Project
Activity ID: 1EEC3001 Baseline Cost and Basis of Estimate

Proiect WBS Filter Activity Filter

Baseline Devl 1EEC

Starts In FY *

0.88934 [SYS 061400] .88934200 - System

0.88934 [SYS 061400] .88934200 - System

Straight time: (96 hr)(19.32) = \$1854.72 Cost Center I4260 (Skill Code C080 Pipefitters): Straight time: (96 hr)(20.23) = \$1942.08 Cost Center I4261 (Skill Code C120 RCT): Straight time: (48 hr)(19.32) = \$927.36

Contract Services:

Cost Center I3027 (1 visit by Sample Team)(\$2000 per visit) = \$2,000 Cost Center I3027 Lab Analysis (3 sample)(\$1707 per sample) = \$5121

Total Activity: \$11,845.16

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

ces		Cost Element		Skill		Department	Curve	Quantity	Units
L	750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	85.38	Hours

Factors 96 Hours

						0.88934 ISYS 06140	01.88934200 - Svstem
750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KE10H	Indust/Site Srvs Steelworkers	Linear	42.69 Hours

Factors 48 Hours

0.88934 [SYS 061400] .88934200 -							
750	STRAIGHT TIME BASE	C120 D&D SKILLED TRADES	KE10H	Indust/Site Srvs Steelworkers	Linear	85.38 Hours	

Factors 96 Hours

						0.88934 ISYS 06140	01.88934200 - System
A5R	MISC EXPENSES	0000	NONE	C104S	Closure Management	Linear	6.428.00 Dollars

Factors 7121 Dollars

1.015 -- FY00 Escalation --

Line Item NPMCWM0206 - Close Secondary Containment

BOE

Line Title: Close Secondary Containment

Primary Driver(s):

The estimate is comprised of the following computations:

Cost Center I4264 (Skill Code C120 Exp Oper): Straight time: (32 hr)(19.32) = \$618.24 Cost Center I4261 (Skill Code C120 RCT): Straight time: (16 hr)(19.32) = \$309.12

Contract Services:

Cost Center I3027 (1 visit by Sample Team)(\$2000 per visit) = \$2,000 Cost Center I3027 Lab Analysis (1 sample)(\$1707 per sample) = \$1707

Total Activity: \$4634.36

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es		Cost Element	Skill	Department	Curve	Ouantity	Units
	750	STRAIGHT TIME BASE	C120 D&D SKILLED TRADES	KE10H Indust/Site Srvs Steelworkers	Linear	28.46	Hours

Factors 32 Hours

						0.88934 [SYS 06140	001 .88934200 - Svstem
750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KE10H	Indust/Site Srvs Steelworkers	Linear	14.23 Hours
F	40						

Factors 16 Hours

						ISYS 061400	1 .88934200 - 9	Svstem
A5R MISC EXPENSES	0000 NON	NE	C104S	Closure Management	Line	ar	3.346.24	Dollars

Factors 3707 Dollars 1.015 -- FY00 Escalation --

Line Item NPMCWM0207 - Drain & Isolate

BOE Line Title: Drain & Isolate

Primary Driver(s):

The estimate is comprised of the following computations:

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WBS No: 1EEC03 Rocky Flats Closure Project
Activity ID: 1EEC3001 Baseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter 1EEC Activity Filter *

Starts In FY *

Quantity

Units

Cost Center I4261 (Skill Code C120 RCT):
Straight time: (40 hr)(19.32) = \$772.80
Cost Center I4264 (Skill Code C120 Exp Oper):
Straight time: (80 hr)(19.32) = \$1545.60
Cost Center I4260 (Skill Code C080 Pipefitters):
Straight time: (48 hr)(20.23) = \$971.04
Cost Center I4260 (Skill Code C020 Electricians):
Straight time: (16 hr)(20.62) = \$329.92
Cost Center I3184 (Skill Code M010 1st Line Super):
Straight time: (16 hr)(24.52) = \$392.32
Total Activity: \$4011.68

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

-3		Cost Lientent		Skili		Department	Curve	Cuantity
	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	14.23 Hours
	Factors	16 Hours						
							0.88934 [SYS 06140	01 .88934200 - Svstem
	750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	42.69 Hours
	Factors	48 Hours						
							0.88934 [SYS 06140	01 .88934200 - Svstem
	750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KE10H	Indust/Site Srvs Steelworkers	Linear	71.15 Hours
	Factors	80 Hours						
							0.88934 [SYS 06140	0] .88934200 - System
	750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KE10H	Indust/Site Srvs Steelworkers	Linear	35.57 Hours
	Factors	40 Hours						
								.1

Danartmant

 750
 STRAIGHT TIME BASE
 M010
 FOREMEN / TEAM LEADS / GROUP
 C104S
 Closure Management
 Linear
 14.23 Hours

Factors 16 Hours

0.88934 [SYS 061400] .88934200 - System

Curva

Line Item NPMCWM0208 - Closure Certification

BOE

Line Title: Closure Certification Primary Driver(s):

Cost Flement

The estimate is comprised of the following computations: Cost Center R3008 (Skill Code M030 Program Manager): Straight time: (40 hr)(36.12) = \$1444.80

Contracted Services: A5H410 Closure Certification \$10,000

Total Activity: \$11,444.80

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

ces	Cost Element		Skill		Department		Curve	Ouantity	Units
	750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C104S	Closure Management	Linear	35.57	Hours

Factors 40 Hours

						0.88934 ISYS 06140	<u> 01 .88934200 - S</u>	System
A5R	MISC EXPENSES	0000	NONE	C104S	Closure Management	Linear	9.026.82	Dollars

Factors 10000 Dollars 1.015 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - System

Line Item NPMCWM0210 - Final Building Operations

BOE

Line Title: Final Building Operations Primary Driver(s):

The estimate is comprised of the following computations:

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WBS No: 1EEC03 **Rocky Flats Closure Project** Activity ID: 1EEC3001 **Baseline Cost and Basis of Estimate**

Baseline Devl Proiect WBS Filter 1EEC Activity Filter

Starts In FY *

0.88934 [SYS 061400] .88934200 - System

0.88934 [SYS 061400] .88934200 - System

Cost Center I4264 (Skill Code C120 Exp Oper): Straight time: (48)(19.32) = 927.36Cost Center I4261 (Skill Code C120 RCT): Straight time: (24 hr)(19.32) = \$463.68Total Activity: \$1391.04

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es		Cost Element	Skill		Department	Curve	Ouantity	Units
	750	STRAIGHT TIME BASE	C120 D&D SKILLED TRAI	DES KE10H I	ndust/Site Srvs Steelworkers	Linear	42.69	Hours
F	actors	48 Hours						

0.88934 [SYS 061400] .88934200 - System C120 D&D SKILLED TRADES STRAIGHT TIME BASE KE10H Indust/Site Srvs Steelworkers

Factors 24 Hours

Line Item NPMCWM0211 - Engineering Documentation

Line Title: Engineering Documentation BOE

Primary Driver(s):

The estimate is comprised of the following computations:

Cost Center I0274 (Skill Code E130 Other Engineer):

Straight time: (16)(30.03) = \$480.48

Total Activity: \$480.48

Subcontract services: A5H

Cost Center L3195 (Skill Code M030 Project Manager):

Straight time: (360 hr)(46) = \$16,560

Total Activity: \$94,491.64

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es		Cost Element		Skill		Department	Curve	Ouantity	Units	
	750	STRAIGHT TIME BASE	E130	OTHER ENGINEERS	C105S	Work Control Center	Linear	14.23	Hours	
	_									

Factors 16 Hours

					0.88934 [SYS 06140	01 .88934200 - Svstem
A5H	SUBCONTRACTED SRVS	0000	NONE	C104S Closure Management	Linear	45.191.20 Dollars

49680 Dollars Factors

1.02283 -- FY00 Escalation --

Line Item NPMCWM1000 - Survey and Pack Drums

BOE

```
6 Operation Support Specialists x 83 days x 9 hrs per day = 4482 hrs
CC I4230, R060
1 Foreman x 83 days x 9 hrs per day - 747 hrs
CC L3175 M010
4 RCTs x 83 days x 9 hrs per day = 2988 hrs
CC I4231 T120
1 Radiological Operations Foreman x 83 days x 2 hrs per day = 166 hrs
CC I3168 E160
1 Project Manager x 83 days x 9 hrs per day - 747 hrs
CC L3195 A5H, M030
1 Calibration Technician x 83 days x .5 hrs per day - 41.5 hrs
CC I4232, T190
```

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Proiect Baseline Devl WBS Filter 1EEC

Activity Filter * Starts In FY *

Traffic/Freight Support = 60 hrs, CC D0328

1 Health & Safety Representative x 83 days x 1 hr per day - 83 hrs CC D0448, P090

1 Central Planner x 83 days x 1 hr per day - 83 hrs CC S3144, P070

l Documentation Support x 83 days x 9 hrs per day - 747 hrs CC L3175, G030

Subcontract Services: A5H

Moving/Freight to MSC-Oak Ridge for disposal:

\$3.30/lb, 194,000 lbs - \$640,200

Trucking costs: \$5000 per truck x 10 trucks - \$50,000

CC D0327

1EEC03

1EEC3001

Total Subcontracted Services \$690,200

LATA Corporate Support @ 600 hrs x \$46/hr = 27,600

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

WBS No:

Activity ID:

Cost Element	Skill	Department	Curve	Ouantity Units
750 STRAIGHT TIME BASE	E130 OTHER ENGINEERS	C104S Closure Management	Linear	147.63 Hours
Factors 166 Hours				
				01 .88934200 - Svstem
750 STRAIGHT TIME BASE	G010 ADMINISTRATIVE ASSISTANTS	C104S Closure Management	Linear	664.34 Hours
Factors 747 Hours				
750 STRAIGHT TIME BASE	L090 GENERAL LABORER	1/E4011 In dust/Cits Cours Otto should be		01 .88934200 - Svstem
	LU90 GENERAL LABORER	KE10H Indust/Site Srvs Steelworkers	Linear	53.36 Hours
Factors 60 Hours			0.88034 [676.08140	01 .88934200 - System
750 STRAIGHT TIME BASE	M010 FOREMEN / TEAM LEADS / GROUP	C104S Closure Management	0.86934 1313 00140 Linear	664.34 Hours
Factors 747 Hours	I WOTO II OILEWEIN? TEAW EEABO? GROOT	O 1040 Olosuic Manadement	Lincal	004.04ji l00i3
Taciors III House			0.88934 [SYS 06140	01 .88934200 - System
750 STRAIGHT TIME BASE	M010 FOREMEN / TEAM LEADS / GROUP	C104S Closure Management	Linear	2.657.35 Hours
Factors 2988 Hours				
			0.88934 [SYS 06140	01 .88934200 - Svstem
750 STRAIGHT TIME BASE	P090 INDUSTRIAL HYGIENISTS	C104S Closure Management	Linear	73.82 Hours
Factors 83 Hours				
				01 .88934200 - Svstem
750 STRAIGHT TIME BASE	R010 CHEMICAL SYSTEMS OPERATOR (KE10H Indust/Site Srvs Steelworkers	Linear	3.986.03 Hours
Factors 4482 Hours				
TEO OTRAJOUT TIME BAGE	TOO DAD HAZ DEDILO TECH / DIOK DED	VE4011 1 1 1/0': 0 0: 1 1		01 .88934200 - Svstem
750 STRAIGHT TIME BASE Factors 41.5 Hours	T060 D&D HAZ REDUC TECH / RISK RED	KE10H Indust/Site Srvs Steelworkers	Linear	36.91 Hours
Factors 41.5 Hours			0.88034 [676.08140	01 .88934200 - System
A5H SUBCONTRACTED SRVS	0000 NONE	C104S Closure Management	Linear	25.106.22 Dollars
Factors 27600 Dollars	1.02283 FY00 Escalation	O 1040 Olosuic Manadement	Lincal	25.100.2212011213
27 doc Bollaro	1.02200 1 100 200444011		0.88934 [SYS 06140	01 .88934200 - System
A5H SUBCONTRACTED SRVS	P070 COST ESTIMATORS PLANNERS AN	C104S Closure Management	Linear	3.397.53 Dollars
Factors 83 Hours	45 Dollars per Hour	1.02283 FY00 Escalation		
			0.88934 [SYS 06140	01 .88934200 - Svstem
A5R MISC EXPENSES	0000 NONE	C104S Closure Management	Linear	577,897.10 Dollars
Factors 640200 Dollars	1.015 FY00 Escalation			
			0.88934 [SYS 06140	0] .88934200 - System

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WBS No: 1EEC03 Activity ID: 1EEC3001

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Baseline Devl Proiect WBS Filter 1EEC Activity Filter

Starts In FY

Line Item SYS - Contingency And Escalation

Resources	Cost Element		Skill	Department	Curve	Quantity	Units
	CON CONTINGENCY	0000 NONE		ZDEPT No Department	Linear	246.821.10	Dollars
ي.	Factors 246821 Dollars						
	ESC ESCALATION	0000	NONE	ZDEPT No Department	Linear	103.607.30	Dollars

Factors 103607 Dollars

Activity ID: 1EMC019145 Description: B. 883 Hazards Reduction - Contaminated Area Cost Risk 4 Schedule Risk 4												
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
883HIBAPEN	Planning & Engineering	0.00	each	EE	#Num!	0	0	0	0	0	0	0
883HIBBCHR	Characterization	0.00	each	EE	#Num!	0	0	0	0	0	0	0
883HIBCSPR	Site Preparation	0.00	each	EE	#Num!	0	0	0	0	0	0	0
883HIBDPYA	Physical Activities	0.00	each	EE	#Num!	0	0	0	0	0	0	0
883HIBEPMG	Project Management	0.00	each	EE	#Num!	0	0	0	0	0	0	0
883HIBFSUS	Support Services	0.00	each	EE	#Num!	0	0	0	0	0	0	0
	Tot	al for Activi	ity 1EMC019	9145:		0	0	0	0	0	0	0

Line Item 883HIBAPEN - Planning & Engineering

BOE

Estimators Experience - Estimate is based on Hazards Reduction/Stabilization template prepared by the Kaiser-Hill PCI organization. Experience Item Desc - Planning & Engineering for Contaminaeted Area

Breakdown of Cost Data:

Item - Planning & Engineering for Contaminated Area

Units - 1)Dollars

Unit Cost - 1)22,000

Unit Cost Adjustment factor - None

Revised Unit Cost - None Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

40000

Resourc

rces		Cost Element		Skill		Department	Curve	Ouantity	Units
	A5R	MISC EXPENSES	0000	NONE	C104S	Closure Management	Linear	19,859.01	Dollars

0.55 Dollars per Square Foot Factors

Square Feet 1.015 -- FY00 Escalation --

Line Item 883HIBBCHR - Characterization

BOE

Estimators Experience - Estimate is based on Hazards Reduction/Stabilization template prepared by the Kaiser-Hill PCI organization.

Experience Item Desc - Characterization for Contaminated Area

Breakdown of Cost Data:

Item - Characterization for Contaminate Area

Units - 1)Dollars

Unit Cost - 1)75,600

Unit Cost Adjustment factor - None

Revised Unit Cost - None Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resource

rces	Cost Element Skill		Department	Curve	Ouantity	Units
	A ED MICO EVERNOES	0000 NONE	C104S Closure Management	Linear	68.242.77 D	Oollars

1.89 Dollars per Square Foot Factors

40000 Square Feet 1.015 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - System

0.88934 [SYS 061400] .88934200 - System

Line Item 883HIBCSPR - Site Preparation

BOE

Estimators Experience - Estimate is based on Hazards Reduction/Stabilization template prepared by the Kaiser-Hill PCI organization.

Experience Item Desc - Site Preparation for Contaminated Areas

Breakdown of Cost Data:

Item - Site Preparation for Contaminated Areas

Units - 1)Dollars

WBS No: 1EEC03 Activity ID: 1EMC019145

Rocky Flats Closure Project Baseline Cost and Basis of Estimate Proiect WBS Filter Activity Filter Baseline Devl

1EEC

Starts In FY

0.88934 [SYS 061400] .88934200 - System

0.88934 [SYS 061400] .88934200 - System

Unit Cost - 1)16,000

Unit Cost Adjustment factor - None Revised Unit Cost - None

Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resource

BOE

ces		Cost Element		Skill	Department	Curve	Ouantity	Units
	A5R	MISC EXPENSES	0000	NONE C104S	Closure Management	Linear	14.442.91	Dollars

0.4 Dollars per Square Foot Factors 40000 Square Feet 1.015 -- FY00 Escalation --

Line Item 883HIBDPYA - Physical Activities

Estimators Experience - Estimate is based on Hazards Reduction/Stabilization template prepared by the Kaiser-Hill PCI organization.

Experience Item Desc - Physical Activities for Contaminated Area

Breakdown of Cost Data:

Item - Physical Activities for Contaminated Area

Units - 1)Dollars

Unit Cost - 1)303,200

Unit Cost Adjustment factor - None

Revised Unit Cost - None

Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resource

BOE

rces	Cost Element	Skill	Department	Curve	Ouantity	Units
	A5R MISC EXPENSES	0000 NONE	C104S Closure Management	Linear	273.693.20	Dollars

7.58 Dollars per Square Foot Square Feet 1.015 -- FY00 Escalation --Factors

Line Item 883HIBEPMG - Project Management

Estimators Experience - Estimate is based on Hazards Reduction/Stabilization template prepared by the Kaiser-Hill PCI organization.

Experience Item Desc - Project Management for Contaminated Area

Breakdown of Cost Data:

Item - Project Management for Contaminated Area

Units - 1)Dollars

Unit Cost - 1) 64,800

Unit Cost Adjustment factor - None

Revised Unit Cost - None

Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resource

ces		Cost Element		Skill		Department	Curve	Quantity	Units
	A5R	MISC EXPENSES	0000	NONE	C104S	Closure Management	Linear	58.493.80	Dollars

1.62 Dollars per Square Foot 40000 Square Feet 1.015 -- FY00 Escalation --Factors

Line Item 883HIBFSUS - Support Services

0.88934 [SYS 061400] .88934200 - System

BOE

Estimators Experience - Estimate is based on Hazards Reduction/Stabilization template prepared by the Kaiser-Hill PCI organization.

Experience Item Desc - Support Services for Contaminated Area

Breakdown of Cost Data:

Item - Support Services for Contaminated Area

Units - 1)Dollars

Unit Cost - 1)59,600

Unit Cost Adjustment factor - None

Revised Unit Cost - None

Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Units Resources Skill Cost Element Department Curve

Rockv Flats Closure Proiect

Baseline Cost and Basis of Estimate

Proiect
WBS Filter
1EEC
Activity Filter
*

Factors 1.49 Dollars per Square Foot 40000 Square Feet 1.015 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - System

Activity ID: 1EN	Activity ID: 1EMCWM9012 Description: RCRA Closure of B883 Nitric Acid PWS Cost Risk 4 Schedule Risk 4												
Line Item	Description	Quantity	Units BOI		Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost		
NPMCWM0200	Strategy/Methodology	0.00	1			0	0	0	0	0	0		
NPMCWM0201	Procurement	0.00	ea HC	#Num	0	0	0	0	0	0	0		
NPMCWM0202	Engineering Design Package	0.00	ea HC	#Num	0	0	0	0	0	0	0		
NPMCWM0203	Authorization Basis	0.00	ea HC	#Num	0	0	0	0	0	0	0		
NPMCWM0204	Remove Sludge/Debris	0.00	ea HC	#Num	0	0	0	0	0	0	0		
NPMCWM0205	Rinse Operations	0.00	ea HC	#Num	0	0	0	0	0	0	0		
NPMCWM0206	Close Secondary Containment	0.00	ea HC	#Num	0	0	0	0	0	0	0		
NPMCWM0207	Drain & Isolate	0.00	ea HC	#Num	0	0	0	0	0	0	0		
NPMCWM0208	Closure Certification	0.00	ea HC	#Num	0	0	0	0	0	0	0		
NPMCWM0210	Final Building Operations	0.00	ea HC	#Num	0	0	0	0	0	0	0		
NPMCWM0211	Engineering Documentation	0.00	ea HC	#Num	0	0	0	0	0	0	0		
	Tot	al for Activit	v 1EMCWM9012		0	0	0	0	0	0	0		

Line Item NPMCWM0200 - Strategy/Methodology

BOE

WBS No:

Activity ID:

1EEC03

1EMC019145

Line Title: Strategy/Methodology Primary Driver(s): The estimate is comprised of the following computations: Cost Center R3008 (Skill Code M030 Program Manager): Straight time: (10 hr)(36.12) = \$361.2Cost Center I0383 (Skill Code E080Nuclear Engineers): Straight time: (4 hr)(27.82) = \$111.28Cost Center I3168 (Skill Code P080 Health Physicists): Straight time: (4 hr)(25.72) = \$102.88Cost Center S3143 (Skill Code P090 Industrial Hygienists) Straight time: (4 hr)(26.49) = \$105.96Cost Center R0237 (Skill Code P170 Other Administrative and Professional Occupations): Straight time: (4 hr)(23.68) = \$94.72 Cost Center I0379 (Skill Code P170 Other Administrative and Professional Occupations): Straight time: (4 hr)(23.68) = \$94.72Subcontract Services A5H Cost Center L3175 (Skill Code P170 Other Administrative and Professional Occupations): Straight time: (12 hr)(46) = \$552 Total Activity: \$1422.76 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s	Cost Element		Skill		Department	Curve	Ouantity	Units
	750 STRAIGHT TIME BASE	E080	NUCLEAR (CRITICALITY) ENGINEER	K249S	Nuclear Safety & Licensing	Linear	3.56	Hours
Fac	ctors 4 Hours							
						0.88934 [SYS 06140	01 .88934200 - \$	System
7	750 STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C104S	Closure Management	Linear	8.89	Hours
Fac	ctors 10 Hours							
						0.88934 [SYS 06140	01 .88934200 - \$	System
7	750 STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	C101S	Health & Safety	Linear	3.56	Hours
Fac	ctors 4 Hours							
						0.88934 [SYS 06140	01 .88934200 - 9	System

WBS No: 1EEC03 Proiect Baseline Devl **Rocky Flats Closure Project** Activity ID: 1EMCWM9012 WBS Filter 1EEC **Baseline Cost and Basis of Estimate** Activity Filter Starts In FY 750 STRAIGHT TIME BASE P090 INDUSTRIAL HYGIENISTS C101S Health & Safety Linear Factors Hours 0.88934 [SYS 061400] .88934200 - System 750 STRAIGHT TIME BASE P170 OTHER ADMINISTRATIVE & PROFE | C103S | Environmental Compliance Linear 4 Factors Hours 0.88934 [SYS 061400] .88934200 - System P170 OTHER ADMINISTRATIVE & PROFE | C104S | Closure Management 750 STRAIGHT TIME BASE Linear Factors 4 Hours 0.88934 [SYS 061400] .88934200 - System SUBCONTRACTED SRVS 0000 NONE C104S Closure Management Linear 502.12 Dollars 552 Dollars 1.02283 -- FY00 Escalation --Factors 0.88934 [SYS 061400] .88934200 - System

Line Item NPMCWM0201 - Procurement

BOE

Line Title: Procurement Cost Center: L3195 The estimate is comprised of the following computations: A5C115 Air mover \$6000 A5C115 Miscellaneous \$2000

A5C115 Portable band saw \$1000

Total Activity: \$9000

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

1.02283 -- FY00 Escalation --

Resource

rces		Cost Element		Skill	Department	Curve	Quantity	Units
	A5H	SUBCONTRACTED SRVS	0000	NONE	C106S Business Management Office	Linear	8.186.81	Dollars

9000 Dollars Factors

0.88934 [SYS 061400] .88934200 - System

0.88934 [SYS 061400] .88934200 - System

7.11 Hours

3.56 Hours

3.56 Hours

Line Item NPMCWM0202 - Engineering Design Package

BOE

Line Title: Engineering Design Package Primary Driver(s): The estimate is comprised of the following computations: Cost Center L3184 (Skill Code E130 Other Engineers): Straight time: (240 hr)(30.03) = \$7,207.20Cost Center I3051 (Skill Code E110 Quality Control Engineers): Straight time: (8 hr)(26.49) = \$211.92Cost Center L3184 (Skill Code P170 Other Professionals): Straight time: (8 hr)(23.68) = \$189.44Cost Center I3168 (Skill Code P080 Health Physicist): Straight time: (8 hr)(25.72) = \$205.76Cost Center S3143 (Skill Code P090 Industrial Hygienist): Straight time: (8 hr)(26.49) = \$211.92Cost Center I0274 (Skill Code P170 Other Professionals): Straight time: (16 hr)(23.68) = \$378.88Total Activity: \$3600.32

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

P080 HEALTH PHYSICISTS

Resources

ces		Cost Element	Skill		Department	Curve	Quantity Units
	750 STRA	IGHT TIME BASE	E130 OTHER ENGINEERS	C105S	Work Control Center	Linear	213.44 Hours
	Factors 240) Hours					

750 STRAIGHT TIME BASE Factors 8 Hours 0.88934 [SYS 061400] .88934200 - System

C101S Health & Safety

1EEC03 Baseline Devl Proiect Rocky Flats Closure Project 1EMCWM9012 1EEC Activity ID: WBS Filter **Baseline Cost and Basis of Estimate** Activity Filter Starts In FY * 750 STRAIGHT TIME BASE P090 INDUSTRIAL HYGIENISTS C101S Health & Safety 7.11 Hours Linear Factors Hours 0.88934 [SYS 061400] .88934200 - System 750 STRAIGHT TIME BASE P170 OTHER ADMINISTRATIVE & PROFE | C104S | Closure Management 7.11 Hours Linear 8 Hours Factors 0.88934 [SYS 061400] .88934200 - System 14.23 Hours 750 STRAIGHT TIME BASE P170 OTHER ADMINISTRATIVE & PROFE | C104S | Closure Management Linear Factors 16 Hours 0.88934 [SYS 061400] .88934200 - System C105S Work Control Center A5H SUBCONTRACTED SRVS E110 QUALITY CONTROL ENGINEERS Linear 250.12 Dollars 274.96 Prime Dollars 1.02283 -- FY00 Escalation --Factors 0.88934 [SYS 061400] .88934200 - System Line Item NPMCWM0203 - Authorization Basis Line Title: Authorization Basis Primary Driver(s): The estimate is comprised of the following computations: Cost Center I3051 (Skill Code E110 Quality Control Engineers): Straight time: (8 hr)(26.49) = \$211.92Cost Center L3184 (Skill Code P170 Other Professionals): Straight time: (16 hr)(23.68) = \$378.88Cost Center I3168 (Skill Code P080 Health Physicist): Straight time: (8 hr)(25.72) = \$205.76Cost Center S3143 (Skill Code P090 Industrial Hygienist): Straight time: (8 hr)(26.49) = \$211.92Cost Center I0379 (Skill Code P170 Other Professionals): Straight time: (8 hr)(23.68) = \$189.44 Cost Center I3081 (Skill Code E130 Other Engineers- SES/USQD): Straight time: (16 hr)(30.03) = \$480.48Cost Center S3172 (Skill Code E130 Other Engineers - ORC): Straight time: (32 hr)(30.03) = \$960.96Subcontract services: A5H Cost Center L3195 (Skill code P070 Planners/Schedulers): Straight time: (30 hours)(46) = \$1380.00 Total Activity: \$4019.36 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions. Resources Cost Element Curve Quantity Units E130 OTHER ENGINEERS 750 STRAIGHT TIME BASE C105S Work Control Center Linear 14.23 Hours Factors 16 Hours 0.88934 [SYS 061400] .88934200 - System E130 OTHER ENGINEERS C105S Work Control Center 750 STRAIGHT TIME BASE 7.11 Hours Linear Factors Hours 0.88934 [SYS 061400] .88934200 - System 750 STRAIGHT TIME BASE E130 OTHER ENGINEERS C105S Work Control Center 28.46 Hours Linear Factors Hours 0.88934 [SYS 061400] .88934200 - System 750 STRAIGHT TIME BASE P080 HEALTH PHYSICISTS C101S Health & Safety 7.11 Hours Linear Factors 8 Hours 0.88934 [SYS 061400] .88934200 - System STRAIGHT TIME BASE P090 INDUSTRIAL HYGIENISTS C101S Health & Safety Linear 7.11 Hours Hours Factors 8 0.88934 [SYS 061400] .88934200 - System

WBS No:

BOE

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BS No: ctivity ID:	1EEC03 1EMCWM9012			Closure Project	Baseline Devl 1EEC		
, 12.	121110111110012		Baseline Cost a	nd Basis of Estimate	WBS Filter Activity Filter	*	Starts In FY *
	750 STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C104S Closure Management	TACHTET A THE	Linear	14.23 Hours
	Factors 16 Hours	•	•	,		•	· ·
			1			0.88934 [SYS 0614	001 .88934200 - Svstem
	A5H SUBCONTRACTED SRVS	0000	NONE	C104S Closure Management		Linear	1.255.31 Dollars
	Factors 1380 Dollars		1.02283 FY00 Escalation			0.00004 [0\/0.0044	001 00004000 - 0:
	A5H SUBCONTRACTED SRVS	F110	QUALITY CONTROL ENGINEERS	C105S Work Control Center		0.88934 1515 0614 Linear	001 .88934200 - Svstem 250.12 Dollars
	Factors 274.96 Prime Dollars	1 =110	1.02283 FY00 Escalation	TOTO THE TOTAL COLLEGE		Elliodi	LOO. I LIDONAIO
						0.88934 [SYS 0614	001 .88934200 - System
	MCWM0204 - Remove Sludge/Debris						
BOE	Line Title: Remove Sludge/Debri Primary Driver(s):	S					
	The estimate is comprised of the	following	g computations:				
	G. at. G. at. 74064 (Glaill G. 1. G1	00 = 0					
	Cost Center I4264 (Skill Code C1 Straight time: (160 hr)(19.32)						
	Cost Center I4260 (Skill Code CO						
	Straight time: (160 hr)(20.23)						
	Cost Center I4261 (Skill Code C1 Straight time: (80 hr)(19.32) =						
	Cost Center L3184 (Skill Code M0		ine Supervisor):				
	Straight time: $(24 \text{ hr})(24.52) =$	\$588.48	_				
	Cost Center S3143 (Skill Code P0 Straight time: (40 hr)(26.49) =		crial Hygienist):				
	_	\$1039.00					
	Total Activity: \$9521.68						
	This estimate includes a project	productiv	tity/efficiency factor for com	mitted but as yet undefined	acat roduatio	ns.	
_				_	COSC TEGUCTIO		
Resources		0000	Skill	Department		Curve	Ouantity Units
Resources	750 STRAIGHT TIME BASE	C080	Skill PLUMBERS AND PIPEFITTERS	Department KE10H Indust/Site Srvs Steelwork			Ouantity Units 142.29 Hours
Resources		C080				Curve Linear	142.29 Hours
Resources	750 STRAIGHT TIME BASE				kers	Curve Linear	
Resources	750 STRAIGHT TIME BASE Factors 160 Hours		PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwork	kers	Curve Linear 0.88934 [SYS 0614	142.29 Hours 001 .88934200 - System
Resources	750 STRAIGHT TIME BASE Factors 160 Hours 750 STRAIGHT TIME BASE Factors 160 Hours	C120	PLUMBERS AND PIPEFITTERS D&D SKILLED TRADES	KE10H Indust/Site Srvs Steelwork KE10H Indust/Site Srvs Steelwork	kers	Curve Linear 0.88934 ISYS 0614 Linear	142.29 Hours 001.88934200 - System 142.29 Hours 001.88934200 - System
Resources	750 STRAIGHT TIME BASE Factors 160 Hours 750 STRAIGHT TIME BASE Factors 160 Hours 750 STRAIGHT TIME BASE	C120	PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelwork	kers	Curve Linear 0.88934 ISYS 0614 Linear	142.29 Hours 001.88934200 - System 142.29 Hours
Resources	750 STRAIGHT TIME BASE Factors 160 Hours 750 STRAIGHT TIME BASE Factors 160 Hours	C120	PLUMBERS AND PIPEFITTERS D&D SKILLED TRADES	KE10H Indust/Site Srvs Steelwork KE10H Indust/Site Srvs Steelwork	kers	Curve Linear 0.88934 [SYS 0614 Linear 0.88934 [SYS 0614 Linear	142.29 Hours 001.88934200 - System 142.29 Hours 001.88934200 - System 71.15 Hours
Resources	750 STRAIGHT TIME BASE Factors 160 Hours 750 STRAIGHT TIME BASE Factors 160 Hours 750 STRAIGHT TIME BASE Factors 80 Hours	C120	D&D SKILLED TRADES D&D SKILLED TRADES	KE10H Indust/Site Srvs Steelwork KE10H Indust/Site Srvs Steelwork KE10H Indust/Site Srvs Steelwork	kers	Curve Linear 0.88934 ISYS 0614 Linear 0.88934 ISYS 0614 Linear 0.88934 ISYS 0614	142.29 Hours
Resources	750 STRAIGHT TIME BASE Factors 160 Hours 750 STRAIGHT TIME BASE Factors 160 Hours 750 STRAIGHT TIME BASE Factors 80 Hours	C120	PLUMBERS AND PIPEFITTERS D&D SKILLED TRADES	KE10H Indust/Site Srvs Steelwork KE10H Indust/Site Srvs Steelwork	kers	Curve Linear 0.88934 [SYS 0614 Linear 0.88934 [SYS 0614 Linear	142.29 Hours 001.88934200 - System 142.29 Hours 001.88934200 - System 71.15 Hours
Resources	750 STRAIGHT TIME BASE Factors 160 Hours 750 STRAIGHT TIME BASE Factors 160 Hours 750 STRAIGHT TIME BASE Factors 80 Hours 750 STRAIGHT TIME BASE Factors 4 Hours	C120	D&D SKILLED TRADES D&D SKILLED TRADES D&D SKILLED TRADES FOREMEN / TEAM LEADS / GROUP	KE10H Indust/Site Srvs Steelwork KE10H Indust/Site Srvs Steelwork KE10H Indust/Site Srvs Steelwork C104S Closure Management	kers	Curve Linear 0.88934 [SYS 0614 Linear 0.88934 [SYS 0614 Linear 0.88934 [SYS 0614 Linear	142.29 Hours 001.88934200 - System 142.29 Hours 001.88934200 - System 71.15 Hours 001.88934200 - System 21.34 Hours 001.88934200 - System
Resources	750 STRAIGHT TIME BASE Factors 160 Hours 750 STRAIGHT TIME BASE Factors 160 Hours 750 STRAIGHT TIME BASE Factors 80 Hours 750 STRAIGHT TIME BASE Factors 24 Hours 750 STRAIGHT TIME BASE	C120	D&D SKILLED TRADES D&D SKILLED TRADES	KE10H Indust/Site Srvs Steelwork KE10H Indust/Site Srvs Steelwork KE10H Indust/Site Srvs Steelwork	kers	Curve Linear 0.88934 [SYS 0614 Linear 0.88934 [SYS 0614 Linear 0.88934 [SYS 0614 Linear	142.29 Hours 001.88934200 - System 142.29 Hours 001.88934200 - System 71.15 Hours 001.88934200 - System 21.34 Hours
Resources	750 STRAIGHT TIME BASE Factors 160 Hours 750 STRAIGHT TIME BASE Factors 160 Hours 750 STRAIGHT TIME BASE Factors 80 Hours 750 STRAIGHT TIME BASE Factors 4 Hours	C120	D&D SKILLED TRADES D&D SKILLED TRADES D&D SKILLED TRADES FOREMEN / TEAM LEADS / GROUP	KE10H Indust/Site Srvs Steelwork KE10H Indust/Site Srvs Steelwork KE10H Indust/Site Srvs Steelwork C104S Closure Management	kers	Curve Linear 0.88934 [SYS 0614 Linear 0.88934 [SYS 0614 Linear 0.88934 [SYS 0614 Linear 0.88934 [SYS 0614 Linear	142.29 Hours 001.88934200 - System 142.29 Hours 001.88934200 - System 71.15 Hours 001.88934200 - System 21.34 Hours 001.88934200 - System 35.57 Hours
	750 STRAIGHT TIME BASE Factors 160 Hours 750 STRAIGHT TIME BASE Factors 160 Hours 750 STRAIGHT TIME BASE Factors 80 Hours 750 STRAIGHT TIME BASE Factors 24 Hours 750 STRAIGHT TIME BASE Factors 40 Hours	C120	D&D SKILLED TRADES D&D SKILLED TRADES D&D SKILLED TRADES FOREMEN / TEAM LEADS / GROUP	KE10H Indust/Site Srvs Steelwork KE10H Indust/Site Srvs Steelwork KE10H Indust/Site Srvs Steelwork C104S Closure Management	kers	Curve Linear 0.88934 [SYS 0614 Linear 0.88934 [SYS 0614 Linear 0.88934 [SYS 0614 Linear 0.88934 [SYS 0614 Linear	142.29 Hours 001.88934200 - System 142.29 Hours 001.88934200 - System 71.15 Hours 001.88934200 - System 21.34 Hours 001.88934200 - System
ne Item NP	750 STRAIGHT TIME BASE Factors 160 Hours 750 STRAIGHT TIME BASE Factors 160 Hours 750 STRAIGHT TIME BASE Factors 80 Hours 750 STRAIGHT TIME BASE Factors 24 Hours 750 STRAIGHT TIME BASE	C120	D&D SKILLED TRADES D&D SKILLED TRADES D&D SKILLED TRADES FOREMEN / TEAM LEADS / GROUP	KE10H Indust/Site Srvs Steelwork KE10H Indust/Site Srvs Steelwork KE10H Indust/Site Srvs Steelwork C104S Closure Management	kers	Curve Linear 0.88934 [SYS 0614 Linear 0.88934 [SYS 0614 Linear 0.88934 [SYS 0614 Linear 0.88934 [SYS 0614 Linear	142.29 Hours 001.88934200 - System 142.29 Hours 001.88934200 - System 71.15 Hours 001.88934200 - System 21.34 Hours 001.88934200 - System 35.57 Hours
ne Item NP	750 STRAIGHT TIME BASE Factors 160 Hours 750 STRAIGHT TIME BASE Factors 160 Hours 750 STRAIGHT TIME BASE Factors 80 Hours 750 STRAIGHT TIME BASE Factors 24 Hours 750 STRAIGHT TIME BASE Factors 40 Hours MCWM0205 - Rinse Operations Line Title: Rinse Operations Primary Driver(s):	C120 C120 M010 P090	D&D SKILLED TRADES D&D SKILLED TRADES D&D SKILLED TRADES FOREMEN / TEAM LEADS / GROUP INDUSTRIAL HYGIENISTS	KE10H Indust/Site Srvs Steelwork KE10H Indust/Site Srvs Steelwork KE10H Indust/Site Srvs Steelwork C104S Closure Management	kers	Curve Linear 0.88934 [SYS 0614 Linear 0.88934 [SYS 0614 Linear 0.88934 [SYS 0614 Linear 0.88934 [SYS 0614 Linear	142.29 Hours 001.88934200 - System 142.29 Hours 001.88934200 - System 71.15 Hours 001.88934200 - System 21.34 Hours 001.88934200 - System 35.57 Hours
ne Item NP BOE	750 STRAIGHT TIME BASE Factors 160 Hours 750 STRAIGHT TIME BASE Factors 160 Hours 750 STRAIGHT TIME BASE Factors 80 Hours 750 STRAIGHT TIME BASE Factors 24 Hours 750 STRAIGHT TIME BASE Factors 40 Hours MCWM0205 - Rinse Operations Line Title: Rinse Operations	C120 C120 M010 P090	D&D SKILLED TRADES D&D SKILLED TRADES D&D SKILLED TRADES FOREMEN / TEAM LEADS / GROUP INDUSTRIAL HYGIENISTS	KE10H Indust/Site Srvs Steelwork KE10H Indust/Site Srvs Steelwork KE10H Indust/Site Srvs Steelwork C104S Closure Management	kers	Curve Linear 0.88934 [SYS 0614 Linear 0.88934 [SYS 0614 Linear 0.88934 [SYS 0614 Linear 0.88934 [SYS 0614 Linear	142.29 Hours 001.88934200 - System 142.29 Hours 001.88934200 - System 71.15 Hours 001.88934200 - System 21.34 Hours 001.88934200 - System 35.57 Hours
ne Item NP	750 STRAIGHT TIME BASE Factors 160 Hours 750 STRAIGHT TIME BASE Factors 160 Hours 750 STRAIGHT TIME BASE Factors 80 Hours 750 STRAIGHT TIME BASE Factors 24 Hours 750 STRAIGHT TIME BASE Factors 40 Hours PMCWM0205 - Rinse Operations Primary Driver(s): The estimate is comprised of the	C120 C120 M010 P090 following	D&D SKILLED TRADES D&D SKILLED TRADES D&D SKILLED TRADES FOREMEN / TEAM LEADS / GROUP INDUSTRIAL HYGIENISTS	KE10H Indust/Site Srvs Steelwork KE10H Indust/Site Srvs Steelwork KE10H Indust/Site Srvs Steelwork C104S Closure Management	kers	Curve Linear 0.88934 [SYS 0614 Linear 0.88934 [SYS 0614 Linear 0.88934 [SYS 0614 Linear 0.88934 [SYS 0614 Linear	142.29 Hours 001.88934200 - System 142.29 Hours 001.88934200 - System 71.15 Hours 001.88934200 - System 21.34 Hours 001.88934200 - System 35.57 Hours
ne Item NP	750 STRAIGHT TIME BASE Factors 160 Hours 750 STRAIGHT TIME BASE Factors 160 Hours 750 STRAIGHT TIME BASE Factors 80 Hours 750 STRAIGHT TIME BASE Factors 24 Hours 750 STRAIGHT TIME BASE Factors 40 Hours MCWM0205 - Rinse Operations Line Title: Rinse Operations Primary Driver(s): The estimate is comprised of the Cost Center I4264 (Skill Code C1 Straight time: (96 hr)(19.32) =	C120 C120 M010 P090 following 20 Exp 0p \$1854.72	PLUMBERS AND PIPEFITTERS D&D SKILLED TRADES D&D SKILLED TRADES FOREMEN / TEAM LEADS / GROUP INDUSTRIAL HYGIENISTS g computations: per):	KE10H Indust/Site Srvs Steelwork KE10H Indust/Site Srvs Steelwork KE10H Indust/Site Srvs Steelwork C104S Closure Management	kers	Curve Linear 0.88934 [SYS 0614 Linear 0.88934 [SYS 0614 Linear 0.88934 [SYS 0614 Linear 0.88934 [SYS 0614 Linear	142.29 Hours 001.88934200 - System 142.29 Hours 001.88934200 - System 71.15 Hours 001.88934200 - System 21.34 Hours 001.88934200 - System 35.57 Hours
ne Item NP	750 STRAIGHT TIME BASE Factors 160 Hours 750 STRAIGHT TIME BASE Factors 160 Hours 750 STRAIGHT TIME BASE Factors 80 Hours 750 STRAIGHT TIME BASE Factors 24 Hours 750 STRAIGHT TIME BASE Factors 40 Hours MCWM0205 - Rinse Operations Drimary Driver(s): The estimate is comprised of the Cost Center I4264 (Skill Code C1 Straight time: (96 hr)(19.32) = Cost Center I4260 (Skill Code C0	C120 C120 M010 P090 following 20 Exp Op \$1854.72 80 Pipef:	PLUMBERS AND PIPEFITTERS D&D SKILLED TRADES D&D SKILLED TRADES FOREMEN / TEAM LEADS / GROUP INDUSTRIAL HYGIENISTS g computations: per):	KE10H Indust/Site Srvs Steelwork KE10H Indust/Site Srvs Steelwork KE10H Indust/Site Srvs Steelwork C104S Closure Management	kers	Curve Linear 0.88934 [SYS 0614 Linear 0.88934 [SYS 0614 Linear 0.88934 [SYS 0614 Linear 0.88934 [SYS 0614 Linear	142.29 Hours 001.88934200 - System 142.29 Hours 001.88934200 - System 71.15 Hours 001.88934200 - System 21.34 Hours 001.88934200 - System 35.57 Hours
ne Item NP	750 STRAIGHT TIME BASE Factors 160 Hours 750 STRAIGHT TIME BASE Factors 160 Hours 750 STRAIGHT TIME BASE Factors 80 Hours 750 STRAIGHT TIME BASE Factors 24 Hours 750 STRAIGHT TIME BASE Factors 40 Hours MCWM0205 - Rinse Operations Primary Driver(s): The estimate is comprised of the Cost Center I4264 (Skill Code C1 Straight time: (96 hr)(19.32) = Cost Center I4260 (Skill Code C0 Straight time: (96 hr)(20.23) =	C120 C120 M010 P090 following 20 Exp Or \$1854.72 80 Pipef: \$1942.08	PLUMBERS AND PIPEFITTERS D&D SKILLED TRADES D&D SKILLED TRADES FOREMEN / TEAM LEADS / GROUP INDUSTRIAL HYGIENISTS g computations: per):	KE10H Indust/Site Srvs Steelwork KE10H Indust/Site Srvs Steelwork KE10H Indust/Site Srvs Steelwork C104S Closure Management	kers	Curve Linear 0.88934 [SYS 0614 Linear 0.88934 [SYS 0614 Linear 0.88934 [SYS 0614 Linear 0.88934 [SYS 0614 Linear	142.29 Hours 001.88934200 - System 142.29 Hours 001.88934200 - System 71.15 Hours 001.88934200 - System 21.34 Hours 001.88934200 - System 35.57 Hours
ne Item NP	750 STRAIGHT TIME BASE Factors 160 Hours 750 STRAIGHT TIME BASE Factors 160 Hours 750 STRAIGHT TIME BASE Factors 80 Hours 750 STRAIGHT TIME BASE Factors 24 Hours 750 STRAIGHT TIME BASE Factors 24 Hours 750 STRAIGHT TIME BASE Factors 40 Hours MCWM0205 - Rinse Operations Line Title: Rinse Operations Primary Driver(s): The estimate is comprised of the Cost Center I4264 (Skill Code C1 Straight time: (96 hr)(19.32) = Cost Center I4260 (Skill Code C3 Straight time: (96 hr)(20.23) = Cost Center I4261 (Skill Code C1	C120 C120 M010 P090 following 20 Exp Op \$1854.72 80 Pipef: \$1942.08 \$20 RCT):	PLUMBERS AND PIPEFITTERS D&D SKILLED TRADES D&D SKILLED TRADES FOREMEN / TEAM LEADS / GROUP INDUSTRIAL HYGIENISTS g computations: per):	KE10H Indust/Site Srvs Steelwork KE10H Indust/Site Srvs Steelwork KE10H Indust/Site Srvs Steelwork C104S Closure Management	kers	Curve Linear 0.88934 [SYS 0614 Linear 0.88934 [SYS 0614 Linear 0.88934 [SYS 0614 Linear 0.88934 [SYS 0614 Linear	142.29 Hours 001.88934200 - System 142.29 Hours 001.88934200 - System 71.15 Hours 001.88934200 - System 21.34 Hours 001.88934200 - System 35.57 Hours
ne Item NP	750 STRAIGHT TIME BASE Factors 160 Hours 750 STRAIGHT TIME BASE Factors 160 Hours 750 STRAIGHT TIME BASE Factors 80 Hours 750 STRAIGHT TIME BASE Factors 24 Hours 750 STRAIGHT TIME BASE Factors 40 Hours MCWM0205 - Rinse Operations Primary Driver(s): The estimate is comprised of the Cost Center I4264 (Skill Code Cl Straight time: (96 hr)(19.32) = Cost Center I4260 (Skill Code Cl Straight time: (96 hr)(20.23) = Cost Center I4261 (Skill Code Cl Straight time: (48 hr)(19.32) =	C120 C120 M010 P090 following 20 Exp Op \$1854.72 80 Pipef: \$1942.08 \$20 RCT):	PLUMBERS AND PIPEFITTERS D&D SKILLED TRADES D&D SKILLED TRADES FOREMEN / TEAM LEADS / GROUP INDUSTRIAL HYGIENISTS g computations: per):	KE10H Indust/Site Srvs Steelwork KE10H Indust/Site Srvs Steelwork KE10H Indust/Site Srvs Steelwork C104S Closure Management	kers	Curve Linear 0.88934 [SYS 0614 Linear 0.88934 [SYS 0614 Linear 0.88934 [SYS 0614 Linear 0.88934 [SYS 0614 Linear	142.29 Hours 001.88934200 - System 142.29 Hours 001.88934200 - System 71.15 Hours 001.88934200 - System 21.34 Hours 001.88934200 - System 35.57 Hours
e Item NP	750 STRAIGHT TIME BASE Factors 160 Hours 750 STRAIGHT TIME BASE Factors 160 Hours 750 STRAIGHT TIME BASE Factors 80 Hours 750 STRAIGHT TIME BASE Factors 24 Hours 750 STRAIGHT TIME BASE Factors 24 Hours 750 STRAIGHT TIME BASE Factors 40 Hours MCWM0205 - Rinse Operations Line Title: Rinse Operations Primary Driver(s): The estimate is comprised of the Cost Center I4264 (Skill Code C1 Straight time: (96 hr)(19.32) = Cost Center I4260 (Skill Code C3 Straight time: (96 hr)(20.23) = Cost Center I4261 (Skill Code C1	C120 C120 M010 P090 following 20 Exp Op \$1854.72 80 Pipef: \$1942.08 \$20 RCT):	PLUMBERS AND PIPEFITTERS D&D SKILLED TRADES D&D SKILLED TRADES FOREMEN / TEAM LEADS / GROUP INDUSTRIAL HYGIENISTS g computations: per):	KE10H Indust/Site Srvs Steelwork KE10H Indust/Site Srvs Steelwork KE10H Indust/Site Srvs Steelwork C104S Closure Management	kers	Curve Linear 0.88934 [SYS 0614 Linear 0.88934 [SYS 0614 Linear 0.88934 [SYS 0614 Linear 0.88934 [SYS 0614 Linear	142.29 Hours .001 .88934200 - System

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WBS No: 1EEC03 Rockv Flats Closure Project WBS Filter
Activity ID: 1EMCWM9012 Baseline Cost and Basis of Estimate

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Proiect Baseline Devl WBS Filter 1EEC

0.88934 [SYS 061400] .88934200 - System

0.88934 [SYS 061400] .88934200 - System

Cost Center I3027 (1 visit by Sample Team)(\$2000 per visit) = \$2,000
Cost Center I3027 Lab Analysis (3 sample)(\$1707 per sample) = \$5121

Total Activity: \$11,845.16

Resources

BOE

ces		Cost Element		Skill		Department	Curve	Quantity	Units
	750	STRAIGHT TIME BASE	C080 F	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	85.38	Hours

Factors 96 Hours

						0.88934 [SYS 061400	01 .88934200 - Svstem
750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KE10H	Indust/Site Srvs Steelworkers	Linear	42.69 Hours
г.	40						

Factors 48 Hours

						0.88934 [SYS 06140	01 .88934200 - Svstem
750 ST	RAIGHT TIME BASE	C120	D&D SKILLED TRADES	KE10H	Indust/Site Srvs Steelworkers	Linear	85.38 Hours

Factors 96 Hours

 A5R
 MISC EXPENSES
 0000
 NONE
 C104S
 Closure Management
 Linear
 6.428.00|Dollars

Factors 7121 Dollars 1.015 -- FY00 Escalation --

Line Item NPMCWM0206 - Close Secondary Containment

Line Title: Close Secondary Containment

Primary Driver(s):

The estimate is comprised of the following computations:

Cost Center I4264 (Skill Code C120 Exp Oper): Straight time: (32 hr)(19.32) = \$618.24 Cost Center I4261 (Skill Code C120 RCT): Straight time: (16 hr)(19.32) = \$309.12

Contract Services:

Cost Center I3027 (1 visit by Sample Team)(\$2000 per visit) = \$2,000 Cost Center I3027 Lab Analysis (1 sample)(\$1707 per sample) = \$1707

Total Activity: \$4634.36

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es	Cost Element		Skill	Department	Curve	Ouantity	Units
	750 STRAIGHT TIME BASE		C120 D&D SKILLED TRADES	KE10H Indust/Site Srvs Steelworkers	Linear	28.46	Hours

Factors 32 Hours

						0.88934 ISYS 061400	01.88934200 - System
750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KE10H	Indust/Site Srvs Steelworkers	Linear	14.23 Hours

Factors 16 Hours

					0.88934 [SYS 06 ²	14001 .88934200 - Svstem
A5R MISC EXPENSES	0000	NONE	C104S	Closure Management	Linear	3.346.24 Dollars

Factors 3707 Dollars 1.015 -- FY00 Escalation --

Line Item NPMCWM0207 - Drain & Isolate

BOE Line Title: Drain & Isolate

Primary Driver(s):

The estimate is comprised of the following computations:

Cost Center I4261 (Skill Code C120 RCT):
Straight time: (40 hr)(19,32) = \$772.80
Cost Center I4264 (Skill Code C120 Exp Oper):
Straight time: (80 hr)(19,32) = \$1545.60
Cost Center I4260 (Skill Code C080 Pipefitters):
Straight time: (48 hr)(20.23) = \$971.04

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WBS No: 1EEC03 Proiect **Rocky Flats Closure Project** 1EMCWM9012 Activity ID: WBS Filter **Baseline Cost and Basis of Estimate** Activity Filter

Cost Center I4260 (Skill Code C020 Electricians): Straight time: (16 hr)(20.62) = \$329.92 Cost Center L3184 (Skill Code M010 1st Line Super): Straight time: (16 hr)(24.52) = \$392.32

Total Activity: \$4011.68

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es	Cost Element	Skill			Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	14.23	Hours
Facto	rs 16 Hours							
_						0.88934 [SYS 06140	01.88934200 -	Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	42.69	Hours
Facto	rs 48 Hours							
						0.88934 [SYS 06140	01.88934200 -	Svstem
750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KE10H	Indust/Site Srvs Steelworkers	Linear	71.15	Hours
Facto	rs 80 Hours							
						0.88934 [SYS 06140	01.88934200 -	Svstem
750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KE10H	Indust/Site Srvs Steelworkers	Linear	35.57	Hours
Facto	rs 40 Hours							
						0.88934 [SYS 06140	01 88934200 -	System

M010 FOREMEN / TEAM LEADS / GROUP C104S Closure Management

Factors 16 Hours

750 STRAIGHT TIME BASE

Line Title: Closure Certification

0.88934 [SYS 061400] .88934200 - System

Linear

Starts In FY *

14.23 Hours

Baseline Devl

1EEC

Line Item NPMCWM0208 - Closure Certification

BOE

Primary Driver(s): The estimate is comprised of the following computations: Cost Center R3008 (Skill Code M030 Program Manager):

Straight time: (40 hr)(36.12) = \$1444.80Contracted Services: A5H410 Closure Certification \$10,000

Total Activity: \$11,444.80

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resource

ces		Cost Element		Skill		Department	Curve	Ouantity Un	its
	750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C104S	Closure Management	Linear	35.57 Hour	s
	Factors	40 Hours							
							0.88934 [SYS 06140	01 .88934200 - Svster	m
	A5R	MISC EXPENSES	0000	NONE	C104S	Closure Management	Linear	9.026.82 Dolla	

Factors 10000 Dollars -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - System

Line Item NPMCWM0210 - Final Building Operations

BOE

Line Title: Final Building Operations Primary Driver(s):

The estimate is comprised of the following computations:

Cost Center I4264 (Skill Code C120 Exp Oper): Straight time: (48)(19.32) = 927.36Cost Center I4261 (Skill Code C120 RCT): Straight time: (24 hr)(19.32) = \$463.68

Total Activity: \$1391.04

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Rocky Flats Closure Project Baseline Cost and Basis of Estimate Proiect WBS Filter Baseline Devl 1EEC

Activity Filter

Starts In FY

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

WBS No:

Activity ID:

Cost Element Department Curve Units 750 STRAIGHT TIME BASE C120 D&D SKILLED TRADES KE10H Indust/Site Srvs Steelworkers Linear 42.69 Hours

48 **Factors** Hours

1EEC03

1EMCWM9012

0.88934 [SYS 061400] .88934200 - System C120 D&D SKILLED TRADES KE10H Indust/Site Srvs Steelworkers 750 STRAIGHT TIME BASE Linear 21.34 Hours

Factors 24 Hours

0.88934 [SYS 061400] .88934200 - System

Line Item NPMCWM0211 - Engineering Documentation

BOE

Line Title: Engineering Documentation Primary Driver(s):

The estimate is comprised of the following computations:

Cost Center I0274 (Skill Code E130 Other Engineer):

Straight time: (16)(30.03) = \$480.48

Total Activity: \$480.48

Subcontract services: A5H

Cost Center L3195 (Skill Code M030 Project Manager):

Straight time: (360 hr)(46) = \$16,560

Total Activity: \$94,491.64

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resourc

rces		Cost Element	Skill			Department	Curve	Quantity	Units	
	750	STRAIGHT TIME BASE	E130	OTHER ENGINEERS	C105S	Work Control Center	Linear	14.23	Hours	

Factors 16 Hours

0.88934 [SYS 061400] .88934200 - System 0000 NONE C104S Closure Management SUBCONTRACTED SRVS Linear 45.191.20 Dollars

Factors 49680 Dollars 1.02283 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - System

WBS No: 1EEC	Title: 865 Cluster Stabilization/H	azard Rem	oval									
Activity ID: 1EE	Description: 865 Cluster Stab/Hazards Re	emoval FY0	00					Cost Risk	2 Schedule R	risk 2		
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
881HR001	HR Project Execution Plan	1.00	each	EE	157	157	8,409	16,382	0	24,791	4,094	28,885
881HR002	HR Work Procedures	1.00	each	EE	142	142	5,213	4,707	0	9,920	2,538	12,458
881HR003	Project Engineering	1.00 each		EE	79	79	4,205	0	0	4,205	2,047	6,252
881HR005	Develop Health/Safetv/Emer, Plan	1.00	each	EE	488	488	14.621	0	0	14.621	7.119	21.740
881HR006				EE	385	385	14.401	2.593	0	16.994	7.012	24.006
SYS	1.00	ea	EE	0	0	0	0	467	467	0	467	
	Tot	al for Activit	ty 1EEC5000):		1.250	46.848	23.681	467	70.996	22.811	93.807

Line Item 881HR001 - HR Project Execution Plan

BOE

Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate.

Breakdown of Cost Data: Item - PEP Development Units - 1) Hours 2) Dollars Unit Cost - 1)200 2)20,350 Unit Cost Adjustment factor - None

Experience Item Desc - Project Execution Plan Initiation and Development

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Rocky Flats Closure Project Baseline Cost and Basis of Estimate Proiect WBS Filter Baseline Devl

1EEC Activity Filter

Starts In FY

2.17762 [SYS 061300] 2.177624 - Target

Revised Unit Cost - N/A Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

WBS No:

Activity ID:

es			Cost Element		Skill		Department	Curve	Quantity	Units	
	750	STRAIGH	HT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C104S	Closure Management	Linear	19.67	Hours	
	Factors	25	Hours		0.36123 May Earned Value Factor						

2.17762 ISYS 0613001 2.177624 - Target M020 MANAGERS (GRADE 69 - 72) C104S Closure Management STRAIGHT TIME BASE Linear 137.66 Hours

Factors 175 Hours 0.36123 May Earned Value Factor

2.17762 [SYS 061300] 2.177624 - Target A5H SUBCONTRACTED SRVS P160 TECHNICAL WRITERS AND EDITOR C104S Closure Management 4.706.85 Dollars Linear **Factors** 26 weeks Dollars per Week 1.02283 -- FY00 Escalation --0.36123 May Earned Value Factor 2.17762 [SYS 061300] 2.177624 - Target A5H SUBCONTRACTED SRVS P160 TECHNICAL WRITERS AND EDITOR C104S Closure Management 11.674.67 Dollars Linear

14510.1 Dollars 1.02283 -- FY00 Escalation --0.36123 May Earned Value Factor Factors

Line Item 881HR002 - HR Work Procedures

1EEC05

1EEC5000

BOE

Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate.

Experience Item Desc - HR Work Procedure Development

Breakdown of Cost Data: Item - Work Procedures Units - 1) Hours 2) Dollars Unit Cost - 1)280 2)7,000 Unit Cost Adjustment factor - None Revised Unit Cost - N/A Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es		Cost Element		Skill		Department	Curve	Ouantity Units
	750	STRAIGHT TIME BASE	M020 MANAG	ERS (GRADE 69 - 72)	C104S	Closure Management	Linear	27.53 Hours
	Factors	35 Hours	0.3612	23 May Earned Value Factor				
							2.17762 [SYS 06130	01 2.177624 - Target
	750	STRAIGHT TIME BASE	M020 MANAG	ERS (GRADE 69 - 72)	C104S	Closure Management	Linear	27.53 Hours
	Factors	35 Hours	0.3612	23 May Earned Value Factor				
							2.17762 [SYS 06130	01 2.177624 - Target
	750	STRAIGHT TIME BASE	P170 OTHER	ADMINISTRATIVE & PROFE	C104S	Closure Management	Linear	86.53 Hours
	Factors	110 Hours	0.3612	23 May Earned Value Factor				
							2.17762 [SYS 06130	01 2.177624 - Target
	A5H	SUBCONTRACTED SRVS	0000 NONE		C104S	Closure Management	Linear	4.706.85 Dollars
	Factors	26 Weeks	225	Dollars per Week		1.02283 FY00 Escalation	0.36123 May Earned	Value Factor
							2.17762 [SYS 06130	01 2.177624 - Target

Line Item 881HR003 - Project Engineering

BOE

Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate.

Experience Item Desc - Project Engineering support for Hazards Reduction

Breakdown of Cost Data:

Item - Project Engineering support for Hazards Reduction

Units - 1) Hours Unit Cost - 1)100

Unit Cost Adjustment factor - None

Revised Unit Cost - None

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Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Activity Filter

Baseline Devl 1EEC

Starts In FY

Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es		Cost Element	Skill	Department	Curve	Ouantity	Units
	750	STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C104S Closure Management	Linear	78.66	Hours

Factors 100 Hours 0.36123 May Earned Value Factor

2.17762 [SYS 061300] 2.177624 - Target

Line Item 881HR005 - Develop Health/Safety/Emer. Plan

BOE

Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate. Experience Item Desc - Develolp Health, Safety, Emergency Plans

Breakdown of Cost Data:

Item - Develop Health, Safety, Emergency Plans

Units - 1) Hours 2) Dollars

Unit Cost - 1)650 2)5,500

Unit Cost Adjustment factor - None

Revised Unit Cost - N/A

Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

0.36123 May Earned Value Factor

Resources

es		Cost Element	Skill		Department	Curve	Quantity Units
	750	STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C104S	Closure Management	Linear	55.06 Hours
	Factors	70 Hours	0.36123 May Earned Value Factor				
						2.17762 [SYS 061300	01 2.177624 - Target
	750	STRAIGHT TIME BASE	P050 COMPLIANCE INSPECTORS	C104S	Closure Management	Linear	275.32 Hours
	Factors	350 Hours	0.36123 May Earned Value Factor				
						2.17762 ISYS 061300	01 2.177624 - Target
	750	STRAIGHT TIME BASE	P080 HEALTH PHYSICISTS	C104S	Closure Management	Linear	78.66 Hours
	Factors	100 Hours	0.36123 May Earned Value Factor				
						2.17762 [SYS 061300	01 2.177624 - Target
	750	STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C104S	Closure Management	Linear	78.66 Hours

100 Line Item 881HR006 - Collect & Develop CDPH&E Data

Factors

2.17762 [SYS 061300] 2.177624 - Target

BOE

Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate.

Experience Item Desc - Collection & Development of CDPH&E Data

Breakdown of Cost Data:

Item - Collection of Data for CDPH&E

Units - 1) Hours 2) Dollars

Unit Cost - 1)489 2)3,222.22

Hours

Unit Cost Adjustment factor - None

Revised Unit Cost - N/A

Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es	Cost Element	Skill	Department	Curve	Ouantity Units
	750 STRAIGHT TIME BASE	E120 SAFETY ENGINEERS	C104S Closure Management	Linear	137.66 Hours
	Factors 175 Hours	0.26122 May Fornad Value Footer			

Factors 175 Hours 0.36123 May Earned Value Factor

2.17762 [SYS 061300] 2.177624 - Target 117.99 Hours C104S Closure Management 750 STRAIGHT TIME BASE M020 MANAGERS (GRADE 69 - 72) Linear 0.36123 May Earned Value Factor Factors 150 Hours

2.17762 [SYS 061300] 2.177624 - Target

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STRAIGHT TIME BASE P050 COMPLIANCE INSPECTORS C104S Closure Management 129.01 Hours Linear

Factors 164 Hours 0.36123 May Earned Value Factor

2.17762 [SYS 061300] 2.177624 - Target 0000 NONE C104S Closure Management 2.592.56 Dollars SUBCONTRACTED SRVS

3222.22 Dollars 1.02283 -- FY00 Escalation --0.36123 May Earned Value Factor Factors

2.17762 [SYS 061300] 2.177624 - Target

Starts In FY

Line Item SYS - Contingency And Escalation

BOE

Resources

es		Cost Element		Skill		Department	Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	274.00	Dollars
_	Factors	273.996 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	193.15	Dollars

193.151 Dollars

tion: OCE Cluster Stab/Hazarda Damoval EV01

Cost Diele 2 Cabadula Piels

ACTIVITY ID: TEE	Description: 865 Cluster Stab/Hazards Re	emovai F Y	J'I					Cost Risk	2 Scheaule K	ilsk Z		
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
881HR001	HR Proiect Execution Plan	1.00	each	EE	178	178	9.507	18.511	0	28.018	4.384	32.402
881HR002	HR Work Procedures	1.00	each	EE	249	249	9.679	5.321	0	15.000	4.463	19.463
881HR005	Develop Health/Safetv/Emer. Plan	1.00	each	EE	551	551	16.530	0	0	16.530	7.622	24.152
881HR006	Collect & Develop CDPH&E Data	1.00	each	EE	435	435	14.812	2.931	0	17.743	6.830	24.574
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	6.276	6.276	0	6.276
	Tot	al for Activ	ity 1EEC500	1:		1.413	50.528	26.764	6.276	83.568	23.300	106.867

Line Item 881HR001 - HR Project Execution Plan

BOE

Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate. Experience Item Desc - Project Execution Plan Initiation and Development

Breakdown of Cost Data: Item - PEP Development

Units - 1) Hours 2) Dollars Unit Cost - 1)200 2)20,350

Unit Cost Adjustment factor - None

Revised Unit Cost - N/A Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es		C	ost Element		Skill		Department	Curve	Ouantity Units
L	750	STRAIGH	TTIME BASE	M020	MANAGERS (GRADE 69 - 72)	C104S	Closure Management	Linear	155.63 Hours
	Factors	175	Hours						
-								0.88934 [SYS 061400	1 88934200 - System
	750	STRAIGH	ΓTIME BASE	M020	MANAGERS (GRADE 69 - 72)	C104S	Closure Management	Linear	22.23 Hours
	Factors	25	Hours						
								0.88934 [SYS 061400	1 .88934200 - System
ļ	A5H	SUBCONT	RACTED SRVS	P160	TECHNICAL WRITERS AND EDITOR	C104S	Closure Management	Linear	5.321.43 Dollars
	Factors	26	weeks		225 Dollars per Week		1.02283 FY00 Escalation		
-								0.88934 [SYS 061400	1 .88934200 - Svstem
	A5H	SUBCONT	RACTED SRVS	P160	TECHNICAL WRITERS AND EDITOR	C104S	Closure Management	Linear	13 189 86 Dollars

14500 Dollars 1.02283 -- FY00 Escalation --Factors

0.88934 [SYS 061400] .88934200 - System

Line Item 881HR002 - HR Work Procedures

BOE

Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and

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WBS No: 1EEC05 Rockv Flats Closure Project
Activity ID: 1EEC5001 Baseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter 1EEC

Starts In FY

processes proprietary to B.865 deem historical costs unreliable as a basis for estimate.

Experience Item Desc - HR Work Procedure Development Breakdown of Cost Data:

Item - Work Procedures
Units - 1)Hours 2)Dollars
Unit Cost - 1)280 2)7,000

Unit Cost Adjustment factor - None

Revised Unit Cost - N/A Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es		(Cost Element		Skill		Department	Curve	Quantity	Units
	750	STRAIGH	T TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C104S	Closure Management	Linear	57.81	Hours
	Factors	65	Hours							
-								0.88934 [SYS 061400	01 .88934200 - \$	System
	750	STRAIGH	T TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C104S	Closure Management	Linear	57.81	Hours
	Factors	65	Hours							
ı.						,		0.88934 [SYS 061400	01 .88934200 - 9	3vstem
	750	STRAIGH	T TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C104S	Closure Management	Linear	133.40	Hours
	Factors	150	Hours							
ΙĒ		1		1	1	1		0.88934 [SYS 061400	01 .88934200 - 9	3vstem

					0.88934 ISYS 06140	01.88934200 - System
A5H SUBCONTRACTED SRVS	0000	NONE	C104S	Closure Management	Linear	5.321.43 Dollars

Factors 26 Weeks 225 Dollars per Week 1.02283 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - System

0.88934 [SYS 061400] .88934200 - System

BOE

Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate.

Experience Item Desc - Develolp Health, Safety, Emergency Plans

Breakdown of Cost Data:

Line Item 881HR005 - Develop Health/Safety/Emer. Plan

Item - Develop Health, Safety, Emergency Plans

Units - 1)Hours 2)Dollars Unit Cost - 1)650 2)5,500

Unit Cost Adjustment factor - None

Revised Unit Cost - N/A

Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es		Cost Element		Skill		Department	Curve	Quantity	Units
	750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C104S	Closure Management	Linear	62.25	Hours
	Factors	70 Hours							
i							0.88934 [SYS 061400	01 .88934200 - \$	System
	750	STRAIGHT TIME BASE	P050	COMPLIANCE INSPECTORS	C104S	Closure Management	Linear	311.27	Hours
	Factors	350 Hours							
							0.88934 [SYS 061400	01 .88934200 - \$	System
	750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	C104S	Closure Management	Linear	88.93	Hours
	Factors	100 Hours							
							0.88934 [SYS 061400	01 .88934200 - \$	System
	750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C104S	Closure Management	Linear	88.93	Hours
	Factors	100 Hours							

Line Item 881HR006 - Collect & Develop CDPH&E Data

BOE

Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate.

WBS No: 1EEC05 Activity ID: 1EEC5001

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Activity Filter Baseline Devl 1EEC

Starts In FY *

Experience Item Desc - Collection & Development of CDPH&E Data

Breakdown of Cost Data:

Item - Collection of Data for CDPH&E

Units - 1)Hours 2)Dollars Unit Cost - 1)400 2)6850

Unit Cost Adjustment factor - None

Revised Unit Cost - N/A Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill	Department	Curve	Quantity Units
750 STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C104S Closure Management	Linear	133.40 Hours
Factors 150 Hours					
				0.88934 [SYS 06140	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	P050	COMPLIANCE INSPECTORS	C104S Closure Management	Linear	155.63 Hours
Factors 175 Hours					
				0.88934 ISYS 06140	001 .88934200 - Svstem
750 STRAIGHT TIME BASE	P050	COMPLIANCE INSPECTORS	C104S Closure Management	Linear	145.85 Hours
Factors 164 Hours					
				0.88934 [SYS 06140	001 .88934200 - Svstem
AEH CLIDCONTDACTED CDVC	0000	NONE	C104S Clooure Management	Lincor	2 021 09 Dollars

A5H SUBCONTRACTED SRVS 0000 NONE C104S Closure Management

3222.22 Dollars 1.02283 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - System

Line Item SYS - Contingency And Escalation

BOE

B
Resources

s	Cost Element		Skill		Department	Curve	Quantity	Units
C	ON CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	3.847.82	Dollars
Fac	ors 3847.82 Dollars							
Е	SC ESCALATION	0000	NONE	ZDEPT	No Department	Linear	2,428,19	Dollars

2428.19 Dollars

Activity ID:	Activity ID: 1EEC5002 Description: 865 Cluster Stab/Hazards Removal FY02								2 Schedule Risk	2	
											Т

Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
1-1EMC210025	Remove Racks of Metal Stock-Five Racks	1.00	each	EE	167	167	4,233	6,679	0	10,913	1,494	12,407
1-1EMC230025	Record File Disposition	1.00	each	EE	246	246	6,961	15,569	0	22,530	2,457	24,987
10-1EMC230025	Disassemble Beryllium Permacon	1.00	each	EE	315	315	9,318	16,776	0	26,094	3,289	29,383
11-1EMC230025	Re-pack Existing Waste Containers-CA	1.00	each	EE	2,260	2,260	58,962	86,067	0	145,029	20,814	165,843
12-1EMC230025	Remove Caustic Scrubber	1.00	each	EE	720	720	19,125	14,540	0	33,665	6,751	40,416
13-1EMC230025	Remove 24K Volt Sutton Press Switch Gear	1.00	each	EE	863	863	20,649	10,349	0	30,997	7,289	38,286
14-1EMC230025	Remove Electrical Service Panels	1.00	each	EE	1,277	1,277	32,700	150,482	0	183,182	11,543	194,725
15-1EMC230025	Additional Oversight	1.00	each	EE	6.439	6.439	142.363	0	0	142.363	50.254	192.617
2-1EMC210025	Disposition Used Pieces of Machinery with PREs	1.00	each	EE	16	16	771	3.437	0	4.208	272	4.480
2-1EMC230025	Complete RCRA Closure	1.00	each	EE	3.683	3.683	96.691	48.821	0	145.512	34.132	179.644
3-1EMC210025	Disposition Used Machinery without PREs	1.00	each	EE	56	56	1.592	1.584	0	3.175	562	3.737
3-1EMC230025	Disconnect Remove CO2 System	1.00	each	EE	431	431	12.440	12.798	0	25.238	4.391	29.629
4-1EMC210025	Empty Carpenters Shop	1.00	each	EE	58	58	1.527	1.660	0	3.187	539	3.726
4-1EMC230025	Close and Decontaminate Met. Labs	1.00	each	EE	2.478	2.478	63.794	54.459	0	118.254	22.519	140.773
5-1EMC210025	Remove Carpenters Shop	1.00	each	EE	39	39	1.272	1.296	0	2.569	449	3.018
5-1EMC230025	Remove Cooling Loop. CT#4 & Heat Exchanger	1.00	each	EE	2.620	2.620	67.508	64.334	0	131.842	23.830	155.672
6-1EMC210025	Empty/Consolidate Four Cargo Containers	1.00	each	EE	88	88	2.445	7.320	0	9.766	863	10.629
6-1EMC230025	Remove Equipment-Cold Machine Shop	1.00	each	EE	2.260	2.260	59.371	69.553	0	128.924	20.958	149.882
7-1EMC210025	Survev/Remove Cargo Containers	1.00	each	EE	56	56	1.297	1.893	0	3.190	458	3.648
7-1EMC230025	Equipment Removal Bervllium Shop	1.00	each	EE	2.260	2.260	58.962	76.971	0	135.933	20.814	156.746
8-1EMC230025	Drain Fluids-Large Machines	1.00	each	EE	1.161	1.161	29.793	39.653	0	69.445	10.517	79.962

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 WBS No:
 1EEC05

 Activity ID:
 1EEC5002

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1EEC

TRUTHY ID. TEEGOODE	Baseline	Cost an	d Basis of Estir	mate	Activit	v Filter *	·	Star	ts In FY *	
865BESAPEN-1E Planning & Engineering	1.00 each	EE	0	0	0	1.273	0	1.273	0	1.273
865BESBCHR-1E Characterization	1.00 each	EE	0	0	0	4.495	0	4.495	0	4.495
865BESCSPR-1E Site Preparation	1.00 each	EE	0	0	0	948	0	948	0	948
865BESDPYA-1E Physical Activities	1.00 each	EE	0	0	0	18.009	0	18.009	0	18.009
865BESEPMG-1E Project Management	1.00 each	EE	0	0	0	3.845	0	3.845	0	3.845
865HIBAPEN-1E Planning & Engineering	1.00 each	EE	0	0	0	18.370	0	18.370	0	18.370
865HIBBCHR-1E Characterization	1.00 each	EE	0	0	0	63.125	0	63.125	0	63.125
865HIBCSPR-1E Site Preparation	1.00 each	EE	0	0	0	13.360	0	13.360	0	13.360
865HIBDPYA-1E Physical Activities	1.00 each	EE	0	0	0	253.166	0	253.166	0	253.166
865HIBEPMG-1E Project Management	1.00 each	EE	0	0	0	54.107	0	54.107	0	54.107
865HIBFSUS-1E Support Services	1.00 each	EE	0	0	0	49.765	0	49.765	0	49.765
865METAPEN-1E Planning & Engineering	1.00 each	EE	0	0	0	406	0	406	0	406
865METBCHR-1E Characterization	1.00 each	EE	0	0	0	1.417	0	1.417	0	1.417
865METCSPR-1E Site Preparation	1.00 each	EE	0	0	0	298	0	298	0	298
865METDPYA-1E Physical Activities	1.00 each	EE	0	0	0	5.678	0	5.678	0	5.678
865METEPMG-1E Project Management	1.00 each	EE	0	0	0	1.219	0	1.219	0	1.219
865METFSUS-1E Support Services	1.00 each	EE	0	0	0	1.119	0	1.119	0	1.119
865PropLI-1EMC0 B.865 Light Industrial Area	1.00 each	HC	0	0	0	697.683	0	697.683	0	697.683
865PropT2B-1EM B.865 Type II w/Both	1.00 each	HC	0	0	0	750.106	0	750.106	0	750.106
865PropT2H-1EM B.865 Type II w/Heavy Machinery	1.00 each	HC	0	0	0	540.774	0	540.774	0	540.774
865PropT2T-1EM B.865 Type II w/Tanks	1.00 each	HC	0	0	0	627.996	0	627.996	0	627.996
865YRDAPEN-1E Planning & Engineering	1.00 each	EE	0	0	0	767	0	767	0	767
865YRDBCHR-1E Characterization	1.00 each	EE	0	0	0	2,753	0	2,753	0	2,753
865YRDCSPR-1E Site Preparation	1.00 each	EE	0	0	0	587	0	587	0	587
865YRDDPYA-1E Physical Activities	1.00 each	EE	0	0	0	11,058	0	11,058	0	11,058
865YRDEPMG-1E Project Management	1.00 each	EE	0	0	0	2,347	0	2,347	0	2,347
865YRDFSUS-1E Support Services	1.00 each	EE	0	0	0	2,166	0	2,166	0	2,166
881HR001 HR Project Execution Plan	1.00 each	EE	178	178	9,507	18,511	0	28,018	3,356	31,374
881HR002 HR Work Procedures	1.00 each	EE	249	249	9,978	5,321	0	15,299	3,522	18,821
881HR005 Develop Health/Safety/Emer. Plan	1.00 each	EE	551	551	16,530	0	0	16,530	5,835	22,365
881HR006 Collect & Develop CDPH&E Data	1.00 each	EE	435	435	16.281	2.931	0	19.212	5.747	24.960
883OFFAPEN-1E Planning & Engineering	1.00 each	EE	0	0	0	2.979	0	2.979	0	2.979
883OFFBCHR-1E Characterization	1.00 each	EE	0	0	0	10.327	0	10.327	0	10.327
883OFFCSPR-1E Site Preparation	1.00 each	EE	0	0	0	2.184	0	2.184	0	2.184
883OFFDPYA-1E Physical Activities	1.00 each	EE	0	0	0	41.505	0	41.505	0	41.505
883OFFEPMG-1E Project Management	1.00 each	EE	0	0	0	8.937	0	8.937	0	8.937
883OFFFSUS-1E Support Services	1.00 each	EE	0	0	0	8.142	0	8.142	0	8.142
883PLEAPEN-1E Planning & Engineering	1.00 each	EE	0	0	0	849	0	849	0	849
883PLEBCHR-1E Characterization	1.00 each	EE	0	0	0	2.997	0	2.997	0	2.997
883PLECSPR-1E Site Preparation	1.00 each	EE	0	0	0	632	0	632	0	632
883PLEDPYA-1E Physical Activities	1.00 each	EE	0	0	0	12.006	0	12.006	0	12.006
883PLEEPMG-1E Project Management	1.00 each	EE	0	0	0	2.564	0	2.564	0	2.564
883PLEFSUS-1E Support Services	1.00 each	EE	0	0	0	2.365	0	2.365	0	2.365
9-1EMC230025 Waste Repackaging-CA	1.00 each	EE	1.695	1.695	42.280	44.928	0	87.208	14.925	102.133
A0PDD01-1EMC0 Hazards Reduction Project Execution Plan	1.00 each	EE	59	59	3.137	13.808	0	16.946	1.107	18.053
AOPDD02-1EMC0 MOU Development	1.00 each	EE EE	75 9	75	3.371	757	0	4.128	1.190	5.318
AOPDD04-1EMC0 Data Collect Ramts for Xition to D&D	1.00 each			9	475	297	0	773	168	941
A0PDD05-1EMC0 Building Conditions Walkdowns	1.00 each	EE EE	687 423	687 423	18.532 12.556	11.122	0	29.654	6.542	36.196
A0PDD06-1EMC0 Building Conditions Documentation A0PDD07-1EMC0 Reduced AB Request	1.00 each 1.00 each	EE	9	423 9	12.556 475	5.242 6.051	0	17.798 6.527	4.432 168	22.230 6.695
A0PDD08-1EMC0 Reduced AB Reduction Work Procedures	1.00 each	EE	100	100	3,270	4,075	0	7,345	1,154	8,499
A0PDD09-1EMC0 Hazards Reduction Work Procedures A0PDD09-1EMC0 Hazards Reduction Work Packages	1.00 each	EE	263	263	9,284	16,130	0	25,413	3,277	28,691
A0PDD10-1EMC0 P/R/E Prev & Corr Mtce Rgmts	1.00 each	EE	134	134	5,756	3,457	0	9,213	2,032	11,245
MOLDETO TEMOO IT HAVE I LEA & COLL MILICE LIGHTIS	1.00 6401		104	104	3,730	3,437	U	J.Z 13	2,002	11,240

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WBS No: 1EEC05

Activity ID: 1EEC5002

Rockv Flats Closure Project Project Baseline Devl
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EEC

	Baseline	Cost and	Basis of Es	timate	Activi	tv Filter *		Star	ts In FY *	
A0PDD11-1EMC0 Room Turnover Checklists	1.00 each	EE	8	8	428	1.092	0	1.519	151	1.670
A0PDD12-1EMC0 Building Rad Survevs	1.00 each	EE	1.145	1.145	41.700	159.418	0	201.118	14.720	215.838
A0PDD13-1EMC0 Relocate Building Personnel	1.00 each	EE	907	907	19.612	19.677	0	39.289	6.923	46.212
A0PDD15-1EMC0 Locker Room Cleanout	1.00 each	EE	387	387	8.370	5.568	0	13.939	2.955	16.893
A0PDD16-1EMC0 Utility Locker/Supply Cabinet Cleanout	1.00 each	EE	586	586	11.836	2.183	0	14.020	4.178	18.198
A0PDD19-1EMC0 Combustible Loading Removal	1.00 each	EE	2.363	2.363	52.239	32.042	0	84.281	18.440	102.721
A0PDD20-1EMC0 Excess Chemical Removal	1.00 each	EE	753	753	24.436	90.860	0	115.296	8.626	123.922
A0PDD23-1EMC0 Property Disposition/Management	1.00 each	EE	721	721	24.026	21.831	0	45.858	8.481	54.339
A0PDD25-1EMC0 Hazards Reduction Completion Mgmt Activities	1.00 each	EE	157	157	6.749	5.458	0	12.206	2.382	14.589
A0PDD26-1EMC0 RMRS Closure Project Mamt Oversight	1.00 each	EE	60	60	3.232	10.916	0	14.148	1.141	15.289
A0PDD27-1EMC0 Hot & Cold Laundry Support	1.00 each	EE	142	142	2.402	99.656	0	102.058	848	102.906
A0PDD28-1EMC0 Miscellaneous Supplies/Subcontracts	1.00 each	EE	0	0	0	162.483	0	162.483	0	162.483
A0PDD29-1EMC0 Safety Support	1.00 each	EE	1.610	1.610	56.211	0	0	56.211	19.842	76.054
A0PDD30-1EMC0 Analytical Services Support	1.00 each	EE	0	0	0	145.543	0	145.543	0	145.543
A0PDD31-1EMC0 JHA/JSA Development	1.00 each	EE	155	155	3.856	12.007	0	15.863	1.361	17.224
A0PDD32-1EMC0 ASP Development	1.00 each	EE	233	233	9.252	3.056	0	12.308	3.266	15.574
A0PDD33-1EMC0 Hazard Assessment Safety Plan	1.00 each	EE	327	327	12.238	1.092	0	13.330	4.320	17.650
A0PDD34-1EMC0 Rad Hazard Characterization	1.00 each	EE	92	92	3.584	8.162	0	11.746	1.265	13.012
A0PDD35-1EMC0 Facility Be Characterization	1.00 each	EE	192	192	6.586	6.276	0	12.862	2.325	15.187
A0PDD36-1EMC0 Additional Reviews (Price-Anderson, ORC, etc.)	1.00 each	EE	854	854	26.021	30.346	0	56.367	9.186	65.553
A0PDD37-1EMC0 QA Reviews	1.00 each	EE	0	0	0	5.871	0	5.871	0	5.871
A1DD01-1EMC01 D&D Planning Phase	1.00 each	EE	3,010	3,010	95.254	110,838	0	206,091	33.624	239,716
A1DD02-1EMC01 Estb. Bldg Ventilation Shutdown Rgmts	1.00 each	EE	535	535	14.611	9.790	0	24.401	5.158	29.559
A1DD03-1EMC01 Develop RadCon Entry Requirements	1.00 each	EE	767	767	27.763	7.505	0	35.268	9.800	45,069
A1DD04-1EMC01 Develop Health/Safety/Emergency Prep. Entry Rgmts	1.00 each	EE	238	238	8,503	7,732	0	16,235	3,001	19,236
A1DD05-1EMC01 Develop HazMat Exposure Protection Plan	1.00 each	EE	761	761	27,000	6,186	0	33,186	9,531	42,717
A1DD06-1EMC01 Building Ventilation Study	1.00 each	EE	567	567	21,157	33,990	0	55,147	7,468	62,616
A1DD07-1EMC01 Shutdown Building Lighting Study	1.00 each	EE	1,210	1.210	40.903	26.492	0	67.396	14.439	81.835
A1DD08-1EMC01 Apply Contamination Cntrl Fixative	1.00 each	EE	1,507	1,507	43,641	30,677	0	74,319	15,405	89,724
A1DD09-1EMC01 Training & Qualification	1.00 each	EE	1,217	1,217	28,174	20,749	0	48,922	9,945	58,868
A1DD10-1EMC01 Required Surveillances	1.00 each	EE	2.990	2.990	69.272	121.067	0	190.338	24.453	214.791
A1DD11-1EMC01 Collect and Develop CDPH&E Data	1.00 each	EE	591	591	21.775	3.821	0	25.595	7.686	33.282
NPMCWM0100-1 Strategy/Methodology	1.00 ea	HC	27	27	1.054	498	0	1.552	372	1.924
NPMCWM0101-1 Procurement	1.00 ea	НС	0	0	0	12.638	0	12.638	0	12.638
NPMCWM0102-1 Engineering Design Package	1.00 ea	HC	256	256	6.736	0	0	6.736	2.378	9.114
NPMCWM0103-1 Authorization Basis	1.00 ea	HC	78	78	2.610	1.505	0	4.115	921	5.036
NPMCWM0104-1 Stripout	1.00 ea	HC	356	356	7.325	0	0	7.325	2.586	9.911
NPMCWM0105-1 Clean Closure Operations	1.00 ea	HC	498	498	10.404	15.938	0	26.342	3.673	30.015
NPMCWM0106-1 Remove T-4 and T-5	1.00 ea	HC	697	697	14.756	0	0	14.756	5.209	19.964
NPMCWM0107-1 Close Secondary Containment	1.00 ea	HC	64	64	1.327	3.346	0	4.674	469	5.142
NPMCWM0108-1 Closure Certification	1.00 ea	HC	36	36	1.901	9.096	0	10.998	671	11.669
NPMCWM0109-1 Final Building Operations	1.00 ea	HC	64	64	1.327	0	0	1.327	469	1.796
NPMCWM0110-1 Engineering Documentation	1.00 ea	HC	14	14	487	70.297	0	70.784	172	70.956
SYS Contingency And Escalation	1.00 ea	EE	0	0	0	0	1.135.899	1.135.899	0	1.135.899
	Total for Activity 1EEC5		3	58.534	1.601.967	5.354.897	1.135.899	8.092.763	565.494	8.658.258

Line Item 1-1EMC210025 - Remove Racks of Metal Stock-Five Racks

BOE

Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate.

Experience Item Desc - Remove Racks of Metal Stock - Five Racks of Steel, Stainless Steel, Carbon Steel, Copper, Aluminum must be removed from outside B.865. Breakdown of Cost Data:

Item - Remove Racks of Metal Stock

Units - 1)Hours 10)Dollars

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect E WBS Filter Activity Filter

Baseline Devl 1EEC

C.....

Starts In FY *

Quantity

0.88934 [SYS 061400] .88934200 - System

Unit Cost - 1)970 2)8,000 Unit Cost Adjustment factor - None Revised Unit Cost - N/A Basis for adjustment -N/A

Cont Elamont

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

CL:11

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Re	20	1111	CE	2

i	Cost Element	Skill	Department	Curve	Ouantity Units
750	STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	C104S Closure Management	Linear	6.43 Hours
Factors	20 Hours - Banding, Shipping	Containers 0.36123 May Earned Value Factor			
				0.88934 [SYS 06140	001 .88934200 - Svstem
750	STRAIGHT TIME BASE	L060 MISSION SUP SPEC II (FLTTCH, WS	KE10H Indust/Site Srvs Steelworkers	Linear	25.70 Hours
Factors	80 Hours - WGI; Waste Certifi	fication 0.36123 May Earned Value Factor			
				0.88934 [SYS 06140	001 .88934200 - Svstem
750	STRAIGHT TIME BASE	L060 MISSION SUP SPEC II (FLTTCH. WS	KE10H Indust/Site Srvs Steelworkers	Linear	77.10 Hours
Factors	240 Hours - Waste Packaging	0.36123 May Earned Value Factor			
				0.88934 [SYS 06140	001 .88934200 - Svstem
750	STRAIGHT TIME BASE	L060 MISSION SUP SPEC II (FLTTCH, WS	KE10H Indust/Site Srvs Steelworkers	Linear	9.64 Hours
Factors	30 Hours - WGI: Waste Certifi	fication 0.36123 May Earned Value Factor			
				0.88934 [SYS 06140	01 .88934200 - Svstem
750	STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C104S Closure Management	Linear	25.70 Hours
Factors	80 Hours - Project Manageme	ent & 0.36123 May Earned Value Factor			
				0.88934 [SYS 06140	01 .88934200 - Svstem
750	STRAIGHT TIME BASE	P050 COMPLIANCE INSPECTORS	C104S Closure Management	Linear	6.43 Hours
Factors	20 Hours - Prepare Drum Trav	avelers 0.36123 May Earned Value Factor			
				0.88934 [SYS 06140	001 .88934200 - Svstem
750	STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C242S Transportation	Linear	9.64 Hours
Factors	30 Hours - Fork Truck & Drive	er 0.36123 May Earned Value Factor			
					01 .88934200 - Svstem
750	STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KE10H Indust/Site Srvs Steelworkers	Linear	6.43 Hours
Factors	20 Hours - Organize/Palletize	e Metal 0.36123 May Earned Value Factor			
					01 .88934200 - Svstem
A5C	SUPPLIES	0000 NONE	C104S Closure Management	Linear	2.608.63 Dollars
Factors	8000 Waste Crates, Liners, Band	nding, etc. 1.015 FY00 Escalation	0.36123 May Earned Value Factor		
					01 .88934200 - Svstem
A5H	SUBCONTRACTED SRVS	E130 OTHER ENGINEERS	C104S Closure Management	Linear	4.070.79 Dollars
Factors	12388.5 Prime Dollars	1.02283 FY00 Escalation	0.36123 May Earned Value Factor		

Line Item 1-1EMC230025 - Record File Disposition

BOE

Estimators Experience - Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate. Experience Item Desc - Two cargo containers with epidemiological metrology records need to be dispositioned.

Breakdown of Cost Data:

Item - Record File Disposition
Units - 1)Hours 2)Dollars
Unit Cost - 1)1,030 2)17,716
Unit Cost Adjustment factor - None
Revised Unit Cost - None
Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1EEC

				Baselille Cost all	iu Dasis	o o Estimate	Activity Filter *			Starts In FY *
750	STRAIGH	T TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers		Lir	near	19.28 Hours
Factors	60	Hours		0.36123 May Earned Value Factor						
	1						0	.88934	[SYS 061400].	88934200 - Svstem
750		T TIME BASE	E040	ELECTRICAL ENGINEERS	C104S	Closure Management		Lir	near	32.13 Hours
Factors	100	Hours		0.36123 May Earned Value Factor						
	T		1	I			0			88934200 - Svstem
750		T TIME BASE	L060	MISSION SUP SPEC II (FLTTCH. WS	KE10H	Indust/Site Srvs Steelworkers		Lir	near	64.25 Hours
Factors	200	Hours		0.36123 May Earned Value Factor				00004	[0]/0 004 4001	00004000 0 4
750	CTDAICH	T TIME BASE	14000	MANAGERS (GRADE 69 - 72)	C104C	Closure Management	0		1848 0614001. near	88934200 - Svstem 11.24 Hours
Factors	35	Hours	1 101020	0.36123 May Earned Value Factor	C1045	Closure Management			lear	11.24Inouis
aciors	33	Hours		0.30123 Iviay Earried Value Factor			0	88034	[978 061400]	88934200 - Svstem
750	STRAIGH	T TIME BASE	P070	COST ESTIMATORS PLANNERS AN	C104S	Closure Management	0		near	32.13 Hours
Factors	100	Hours	1 1 010	0.36123 May Earned Value Factor	01010	TO TO THE THE TOTAL THE TANK T	'		loui -	OZ. TOIL IOUIO
	.00	1104.0		0.00120 2404 74.401 40.00			0	.88934	[SYS 061400].	88934200 - Svstem
750	STRAIGH	T TIME BASE	P090	INDUSTRIAL HYGIENISTS	C104S	Closure Management		Lir	near	16.06 Hours
Factors	50	Hours		0.36123 May Earned Value Factor						
						T	0	.88934	[SYS 061400].	88934200 - Svstem
750	STRAIGH	T TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C242S	Transportation		Lir	near	6.43 Hours
Factors	20	Hours		0.36123 May Earned Value Factor						
				1			0			88934200 - Svstem
		T TIME BASE	S020	ENVIRONMENTAL SCIENTISTS	C104S	Closure Management		Lir	near	64.25 Hours
Factors	200	Hours		0.36123 May Earned Value Factor			_			
450	SUPPLIES		0000	NONE	04040		0			88934200 - System
	2500	Dollars	0000	1.015 FY00 Escalation	C104S	Closure Management		Lir	near	2,256.71 Dollars
Factors	2500	Dollars		1.015 FYOU Escalation			0	88034	[6/5 061400]	88934200 - System
A5H	SUBCONT	RACTED SRVS	P140	SAFEGUARDS AND OTHER SECURI	C104S	Closure Management	0		near	2.957.35 Dollars
Factors	45	estimated \$/hr	1 1 140	200 Hours	01040	1.02283 FY00 Escalation -	- 0		Mav Earned Val	
uciors	40	Colimated Will		200 110013		1.02200 1 100 E304141011				88934200 - System
A5H	SUBCONT	RACTED SRVS	S010	CHEMISTS	K267S	Analytical Laboratory Services			near	1.971.57 Dollars
Factors	6000	Dollars		1.02283 FY00 Escalation				.36123	May Earned Val	
-							0	.88934	ISYS 0614001.	88934200 - Svstem
A5H	SUBCONT	RACTED SRVS	T050	RADIATION CONTROL TECHNOLIGI	KE10H	Indust/Site Srvs Steelworkers		Lir	near	8.383.29 Dollars
Factors	200	Hours		46.08 Dollars/Hr.		1.02283 FY00 Escalation -	-			
							0	.88934	[SYS 061400].	88934200 - System

Line Item 10-1EMC230025 - Disassemble Beryllium Permacon

BOE

Estimators Experience - Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate.

Experience Item Desc - Permacon structure, not suitable for repackaging questionable waste crates, must have contents waste packed, be contaminated and

dismantled.

Breakdown of Cost Data: Item - Disassemble Be Permacon

Units - 1)Hours 2)Dollars Unit Cost - 1)1,540 2)42,824

Unit Cost Adjustment factor - None

Revised Unit Cost - N/A

Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Ouantity	Units
	·	•	*			

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Proiect
WBS Filter

Baseline Devl 1EEC

Units

Ouantity

Curve

					Baselille Gost all		or Estimate	Activity Filter *		S	tarts In FY *
750	STRAIGH1	TTIME BASE	C020	ELECTRIC		KE10H	Indust/Site Srvs Steelwork	ers	Line	ar	12.85 Hours
actors	40	Hours		0.36123	May Earned Value Factor						
			1	1						ISYS 0614001.88	
750		TTIME BASE	C120		_ED TRADES	KE10H	Indust/Site Srvs Steelwork	ers	Line	ar	32.13 Hours
actors	100	Hours		0.36123	May Earned Value Factor						
. 1			1	T			T			ISYS 0614001.88	
		TTIME BASE	E070		CAL ENGINEERS	C104S	Closure Management		Line	ar	12.85 Hours
actors	40	Hours		0.36123	May Earned Value Factor						
										ISYS 0614001.88	
		T TIME BASE	L060		SUP SPEC II (FLTTCH. WS	KE10H	Indust/Site Srvs Steelwork	ers	Line	ar	32.13 Hours
actors	100	Hours		0.36123	May Earned Value Factor						
			1	I			T			ISYS 0614001.88	
		T TIME BASE	L060		SUP SPEC II (FLTTCH. WS	KE10H	Indust/Site Srvs Steelwork	ers	Line	ar	64.25 Hours
actors	200	Hours		0.36123	May Earned Value Factor					101/0 00/ 1001 0/	
	0.70 410117		1	1	22 (22 (22 (22)	01010				ISYS 0614001.88	
		TTIME BASE	M020		RS (GRADE 69 - 72)	C104S	Closure Management		Line	ar	45.30 Hours
actors	141	Hours		0.36123	May Earned Value Factor					101/0 00/ 1001 0/	
	0.70 410117			III.ID. IOTO		01010				ISYS 0614001.88	
		TTIME BASE	P090		AL HYGIENISTS	C104S	Closure Management		Line	ar	12.85 Hours
actors	40	Hours		0.36123	May Earned Value Factor				0.00004	[0](0,004,400], 0(004000 0 4
750	CTDAICUI	Γ TIME BASE	D470	OTLIED A	OMINISTRATIVE & PROFE	C104C	Closure Management		0.88934 Line	ISYS 0614001 .88	6.43 Hours
	20		I P170			C1045	Closure Management		Line	ar	6.43 Hours
actors	20	Hours		0.36123	May Earned Value Factor				0.00034	[SYS 061400] .88	024200 Systom
750	CTDAICHI	Γ TIME BASE	8020	ENI/IBONI	MENTAL SCIENTISTS	C1048	Closure Management		<u>0.86934</u> Line		96.38 Hours
	300	Hours	3020		May Earned Value Factor	C1043	Closure Management		Lille	:ai	90.30[ПОИТS
actors	300	Hours		0.30123	iviay Earried Value Factor				0.00034	[SYS 061400] .88	024200 Systom
A5C	SUPPLIES	•	0000	NONE		C104S	Closure Management		Line		1.304.32 Dollar
actors	4000	Dollars	0000		FY00 Escalation	01043	0.36123 May Earned Val	luo Eactor	LINE	<u>ai</u>	1,304.32 D0llal
aciors	4000	Dollars		1.013	I TOO Escalation		0.30123 Way Lamed Va	iue i actoi	0 88034	[SYS 061400] .88	034200 Systom
A5H	SLIBCONT	RACTED SRVS	F130	OTHER EN	IGINEERS	C200S	Engineering Services			ear	2.713.86 Dollar
actors	8259	Prime Dollars	I L 130		FY00 Escalation	02000	0.36123 May Earned Val	lue Factor		ai .	2.7 13.00ID0IIai
uciors	0200	Tillie Dollars		1.02203	I Too Escalation		0.30123 Way Lamed Va	ide i actoi	0 88034	ISYS 0614001 .88	03/200 - System
A5H	SUBCONT	RACTED SRVS	\$010	CHEMISTS	3	K267S	Analytical Laboratory Serv	vices	Line		8.214.86 Dollars
actors	25000	Dollars	. 0010		FY00 Escalation	. 12070	0.36123 May Earned Val			м	O.E 17.00IDUIIAI.
uciors	20000	Dollars		1.02200	1 100 Escalation		0.00120 Way Lattled Va	iuo i uotoi	0.88934	ISYS 0614001.88	934200 - System
A5H	SUBCONT	RACTED SRVS	T050	RADIATIO	N CONTROL TECHNOLIGI	KE10H	Indust/Site Srys Steelwork	ere	Line		4.542.49 Dollar
	300	Hours	. 1000		Dollars/Hr.		1.02283 FY00 Escalat			Mav Earned Value	
actors											

Line Item 11-1EMC230025 - Re-pack Existing Waste Containers-CA

BOE

Resources

Estimators Experience - Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate. Experience Item Desc - 6 Reject waste crates and other questionable containers, with non-compliant situations, will be repacked. Breakdown of Cost Data:

Item - Re-Pack Existing Waste Containers-CA
Units - 1)Hours 2)Dollars
Unit Cost - 1)3,100 2)86,472

Unit Cost Adjustment factor - None Revised Unit Cost - N/A

Cost Element

Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

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Department

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter

Baseline Devl 1EEC

	,			Baselille Cost at	iu Dasis	OI ESIIIIale	Activity Filter	*	Starts In FY *
750	STRAIGH	T TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworker	'S	Linear	177.87 Hours
Factors	200	Hours							
								0.88934 [SYS 06140	
750		T TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworker	S	Linear	177.87 Hours
Factors	200	Hours						0.00004 [0)/0.00440	01 00004000 0 4
750	CTDAICH	T TIME BASE	C080	PLUMBERS AND PIPEFITTERS	I/E4011	Indust/Site Srvs Steelworker	-	0.88934 [SYS 06140 Linear	01 .88934200 - System 88.93 Hours
Factors	100	Hours	1 C080	IPLUMBERS AND PIPEFITTERS	KETUH	Indust/Site Sivs Steelworker	S	Linear	66.93Inouis
" actors	100	Tiouis						0.88934 [SYS 06140	01 88934200 - System
750	STRAIGH	T TIME BASE	C120	D&D SKILLED TRADES	KE10H	Indust/Site Srvs Steelworker	'S	Linear	88.93 Hours
Factors	100	Hours							
	,							0.88934 [SYS 06140	01 .88934200 - Svstem
750		T TIME BASE	E070	MECHANICAL ENGINEERS	C104S	Closure Management		Linear	355.74 Hours
Factors	400	Hours							
			T	I				0.88934 [SYS 06140	
750		T TIME BASE	L060	MISSION SUP SPEC II (FLTTCH. WS	KE10H	Indust/Site Srvs Steelworker	S	Linear	88.93 Hours
Factors	100	Hours						0.88934 [SYS 06140	01 00024200 System
750	STRAIGH	T TIME BASE	1.060	MISSION SUP SPEC II (FLTTCH, WS	KE10H	Indust/Site Says Steelworker	·e	Linear	444.67 Hours
Factors	500	Hours	LUUU	IIIVIOSION SOL SI EC II II EL LOII. WS	I IXE IVII	midds/Oile Oi vs Oleelwoi kei	3	Lilleal	444.071110u13
actors	000	110010						0.88934 [SYS 06140	01 .88934200 - System
750	STRAIGH	T TIME BASE	L070	MISSION SUP SPEC III	KE10H	Indust/Site Srvs Steelworker	'S	Linear	266.80 Hours
Factors	300	Hours							
				T	1	T		0.88934 [SYS 06140	
750		T TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C104S	Closure Management		Linear	125.40 Hours
Factors	141	Hours							
750	CTDAICH	T TIME BASE	P090	INDUSTRIAL HYGIENISTS	C104C	Closure Management		0.88934 [SYS 06140 Linear	266.80 Hours
Factors	300	Hours	1 F090	JINDUSTRIAL HTGIENISTS	C1043	Closure Management		Lilleai	200.00 H0uIS
aciors	300	riouis						0.88934 [SYS 06140	01 88934200 - System
750	STRAIGH	T TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C242S	Transportation		Linear	88.93 Hours
Factors	100	Hours							
	T			T	T			0.88934 [SYS 06140	01 .88934200 - Svstem
750		T TIME BASE	S020	ENVIRONMENTAL SCIENTISTS	C103S	Environmental Compliance		Linear	88.93 Hours
Factors	100	Hours							
	0.100.150			lucus.	01010	Ta.		0.88934 [SYS 06140	
A5C	SUPPLIES 15000	Dollars	0000	INONE 1.015 FY00 Escalation	C104S	Closure Management		Linear	13.540.23 Dollars
Factors	15000	Dollars		1.015 FY00 Escalation				0.88934 [SYS 06140	01 99034300 Systom
A5H	SUBCONT	RACTED SRVS	F130	OTHER ENGINEERS	C105S	Work Control Center		Linear	7.512.76 Dollars
Factors	8259	Prime Dollars	1 = 100	1.02283 FY00 Escalation	1 01000	TYVOIR COINIOI COINCI		Linoui	7.012.7012011010
								0.88934 [SYS 06140	01 .88934200 - Svstem
A5H	SUBCONT	RACTED SRVS	S010	CHEMISTS	C103S	Environmental Compliance		Linear	9.096.46 Dollars
Factors	10000	Dollars		1.02283 FY00 Escalation					
			-	I	1 -			0.88934 [SYS 06140	
A5H		RACTED SRVS	I S010	ICHEMISTS	C103S	Environmental Compliance		Linear	18.192.91 Dollars
Factors	20000	Dollars		1.02283 FY00 Escalation				0.00004 [0)/0.00440	01 00004000 0: :
A5H	SLIBCONT	RACTED SRVS	TOFO	RADIATION CONTROL TECHNOLIGI	KE10LI	Indust/Site Save Steelwarker	···	0.88934 [SYS 06140 Linear	01.88934200 - Svstem 37.724.83 Dollars
Factors	900	Hours	1 1000	46.08 Dollars/Hr.	VEINH	1.02283 FY00 Escalation		Linear	31.124.03ID0llars
aciois	900	iiuuis		TO.UO DUIIAI 5/ FII.		1.02203 1 100 ESCAIALIOI	1	0.88934 [SYS 06140	01 88934200 - System
								0.00304 010 00140	01:00304200 Oy310

Line Item 12-1EMC230025 - Remove Caustic Scrubber

BOE

Estimators Experience - Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation &

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Baseli
WBS Filter 1EEC

Baseline Devl 1EEC

decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate.

Experience Item Desc - The caustic scrubber, located in the SE corner of the building, must have electrical disconnections, prior to free release.

Breakdown of Cost Data:

Item - Remove Caustic Scrubber
Units - 1)Hours 2)Dollars
Unit Cost - 1)990 2)14,608

Unit Cost Adjustment factor - None

Revised Unit Cost - N/A Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es	Cost Element	Skill	Department	Curve	Ouantity Units
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	88.93 Hours
Factors	100 Hours				
				0.88934 [SYS 061400	
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	88.93 Hours
Factors	100 Hours				
				0.88934 [SYS 061400	
750	STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	88.93 Hours
Factors	100 Hours				
				0.88934 ISYS 061400	
750	STRAIGHT TIME BASE	E070 MECHANICAL ENGINEERS	C104S Closure Management	Linear	88.93 Hours
Factors	100 Hours				
				0.88934 ISYS 061400	
750	STRAIGHT TIME BASE	L060 MISSION SUP SPEC II (FLTTCH. WS	KE10H Indust/Site Srvs Steelworkers	Linear	88.93 Hours
Factors	100 Hours				
			T	0.88934 [SYS 061400	
750	STRAIGHT TIME BASE	L060 MISSION SUP SPEC II (FLTTCH. WS	KE10H Indust/Site Srvs Steelworkers	Linear	17.79 Hours
Factors	20 Hours				
	I			0.88934 [SYS 061400	
750	STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C104S Closure Management	Linear	62.25 Hours
Factors	70 Hours				
750	OTDAIGUT TIME DAGE	DOOD INDUCTORAL LIVERSHIPTO	04040 01 14	0.88934 [SYS 061400	35.57 Hours
750	STRAIGHT TIME BASE	P090 INDUSTRIAL HYGIENISTS	C104S Closure Management	Linear	35.57 Hours
Factors	40 Hours			0.00004 [0.00.004.404	N 00004000 O
750	STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C242S Transportation	0.88934 [SYS 061400 Linear	35.57 Hours
		P170 OTHER ADMINISTRATIVE & PROFE	C2425 Transportation	Linear	35.57 HOURS
Factors	40 Hours			0.88934 [SYS 061400	1 00024200 Custom
750	STRAIGHT TIME BASE	S020 ENVIRONMENTAL SCIENTISTS	C103S Environmental Compliance	0.88934 S + S + O6 14 O6 14 O6 14 O6 14 O6 O6 O6 O6 O6 O6 O6 O	35.57 Hours
Factors	•	1 3020 JENVIRONWENTAL SCIENTISTS	C1033 Environmental Compliance	Lilleal	33.37 HOUIS
raciors	40 110015			0.88934 [SYS 061400	11 8893/200 - Svetom
750	STRAIGHT TIME BASE	T070 MAINT, TECHS, (INSTRUMENT TEC	KE10H Indust/Site Srvs Steelworkers	U.00334 1313 001400	88.93 Hours
Factors		T 1070 IIWAINT. TECHS. TINOTIONENT TEC	TL TOTT IIII GUSVOILE STVS SLEETWOINETS	Lilleal	00.931110013
1 actors	100 110413			0.88934 [SYS 061400	11 88934200 - System
A5H	SUBCONTRACTED SRVS	E130 OTHER ENGINEERS	C105S Work Control Center	Linear	1.252.13 Dollars
Factors		1.02283 FY00 Escalation	TOTOGO TITOTIC CONTO		1.EOE. TOIDOIGIO
1 actors	1070.5 Time Bollars	1.02200 1 100 Escalation		0.88934 [SYS 061400	1 88934200 - System
A5H	SUBCONTRACTED SRVS	S010 CHEMISTS	C103S Environmental Compliance	Linear	4.548.23 Dollars
Factors		1.02283 FY00 Escalation		<u> </u>	no responding
	2230 20			0.88934 [SYS 061400	01 .88934200 - Svstem
				<u> </u>	

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1EEC

			Daconiio Goot an	u _uo.o	Activity	Filter *		Starts In FY *
A5H	SUBCONTRACTED SRVS	S010 C	CHEMISTS	C103S	Environmental Compliance		Linear	4.548.23 Dollars
Factors	5000 Dollars		1.02283 FY00 Escalation					
							0.88934 [SYS 061400	01 .88934200 - System
A5H	SUBCONTRACTED SRVS	T050 F	RADIATION CONTROL TECHNOLIGI	KE10H	Indust/Site Srvs Steelworkers		Linear	4.191.65 Dollars
Factors	100 Hours		46.08 Dollars/Hr.		1.02283 FY00 Escalation			

Line Item 13-1EMC230025 - Remove 24K Volt Sutton Press Switch Gear

0.88934 [SYS 061400] .88934200 - System

BOE

Estimators Experience - Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate. Experience Item Desc - 24,000 Volt Sutton Press Switch Gear

Breakdown of Cost Data:

Item - Sutton Press Switch Gear Removal

Item - Sutton Press Switch Gear Remova Units - 1)Hours 2)Dollars Unit Cost - 1)1,150 2)10,000 Unit Cost Adjustment factor - None Revised Unit Cost - N/A Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es		Cost Element		Skill		<u>Department</u>	Curve	Ouantity Units
7	50 STRAIGH	IT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	88.93 Hours
Fac	tors 100	Hours						
							0.88934 [SYS 06	1400] .88934200 - System
7		IT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	88.93 Hours
Fac	tors 100	Hours						
				1				1400] .88934200 - System
		HT TIME BASE	E070	MECHANICAL ENGINEERS	KE10S	Indust/Site Srvs Steelworkers	Linear	88.93 Hours
Fac	tors 100	Hours						
	50 OTD 4101	IT TIME DAGE	1,000	LITH ITY MODISED	00040	C: FI : C ::		1400] .88934200 - System
		HT TIME BASE	L030	UTILITY WORKER	C221S	Steam Plant Operations	Linear	177.87 Hours
Fac	tors 200	Hours					0.00024 16.000.0	14001 .88934200 - Svstem
7	50 STRAIGH	HT TIME BASE	1.060	MISSION SUP SPEC II (FLTTCH. WS	VE10U	Indust/Cita Crya Stachwarkera	0.86934 1515 06 Linear	88.93 Hours
Fac		Hours	LUGU	INISSION SUP SPEC II (FLITCH, WS	KETUH	illidusi/Site Sivs Steelworkers	Lilleal	86.93ITOUIS
ruc	100	110015					30 2V21 NE088 0	14001 .88934200 - Svstem
7	50 STRAIGH	IT TIME BASE	1.070	MISSION SUP SPEC III	KE10H	Indust/Site Srvs Steelworkers	Linear	177.87 Hours
Fac		Hours	I LOTO	IIVIIOOIOIV COI CI EO III	IXE 1011	midds/Oile Oivs Oleciworners	Linear	177.071110013
1 00	200						0.88934 [SYS 06	14001 .88934200 - System
7	50 STRAIGH	IT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	KE10S	Indust/Site Srvs Steelworkers	Linear	62.25 Hours
Fac	tors 70	Hours						
							0.88934 [SYS 06	14001 .88934200 - Svstem
7	50 STRAIGH	IT TIME BASE	P090	INDUSTRIAL HYGIENISTS	C104S	Closure Management	Linear	35.57 Hours
Fac	tors 40	Hours						
_			1		I	T	0.88934 [SYS 06	14001 .88934200 - Svstem
_ 7	50 STRAIGH	IT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C242S	Transportation	Linear	53.36 Hours
Fac	tors 60	Hours						
				1				14001 .88934200 - Svstem
Α		TRACTED SRVS	E130	OTHER ENGINEERS	C105S	Work Control Center	Linear	1.252.13 Dollars
Fac	tors 1376.5	Prime Dollars		1.02283 FY00 Escalation				
			1	Ta.,		I		14001 .88934200 - Svstem
		ITRACTED SRVS	S010	CHEMISTS F. L. I.	C104S	Closure Management	Linear	4,548.23 Dollars
Fac	tors 5000	Dollars		1.02283 FY00 Escalation			0.00004 10000	4.4001.0000.4000
							0.88934 ISYS 06	1400] .88934200 - System

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Baseline Devl Proiect **Rocky Flats Closure Project** WBS Filter 1EEC **Baseline Cost and Basis of Estimate** Activity Filter

			Daseille Cost at	iu basis	OI Estilliate	Activity Filter	*	Starts In FY	*
A5H	SUBCONTRACTED SRVS	S010	CHEMISTS	C104S	Closure Management		Linear	4.548.23	Dollars

Factors 5000 Dollars 1.02283 -- FY00 Escalation --

Line Item 14-1EMC230025 - Remove Electrical Service Panels

WBS No:

Activity ID:

Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate.

Experience Item Desc - Transformers and electrical supply panels in the CA & mechanical room, which will be put in SCO containers and managed as low-level waste.

1EEC05

1EEC5002

Breakdown of Cost Data:

Item - Removal of Electrical Service Panels

Units - 1)Hours 2)Dollars Unit Cost - 1)1,730 2)163,824

Unit Cost Adjustment factor - None Revised Unit Cost - None

Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s		Cost Element		Skill		Department	Curve	Quantity	Units
	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	444.67	Hours
	Factors	500 Hours							
ſ		T		T	T =		0.88934 [SYS 06140		
L	750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	R100S	RMRS Salaried	Linear	88.93	Hours
	Factors	100 Hours							•
Γ	750	STRAIGHT TIME BASE	L060	MISSION SUP SPEC II (FLTTCH, WS	IZE4011	In durable to Comment of the comment	0.88934 [SYS 06140 Linear		System Hours
L	750 Factors	100 Hours	LUOU	INISSION SUP SPEC II (FLI TCH. WS	KETUH	indusi/Site Sivs Steetworkers	Linear	55.93	Inouis
	raciors	100 Hours					0.88934 [SYS 06140	N1 88034200 - 9	System
	750	STRAIGHT TIME BASE	1.070	MISSION SUP SPEC III	KF10H	Indust/Site Srvs Steelworkers	Linear	177.87	
1	Factors	200 Hours		IMIOOTOTY COT CT LO III	IXE IOII	III MOVORO OI VO OROMOTROTO	Linoui	117.01	i louio
_							0.88934 [SYS 06140	01 .88934200 - 3	Svstem
	750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C104S	Closure Management	Linear	94.27	Hours
	Factors	106 Hours (Project Managers)							
ΙĒ		T					0.88934 [SYS 06140	01 .88934200 - 3	Svstem
L	750	STRAIGHT TIME BASE	P050	COMPLIANCE INSPECTORS	C104S	Closure Management	Linear	177.87	Hours
	Factors	200 Hours							
Г				T		T	0.88934 [SYS 06140		
L	750	STRAIGHT TIME BASE	P090	INDUSTRIAL HYGIENISTS	C104S	Closure Management	Linear	88.93	Hours
	Factors	100 Hours					0.00004 [0)/0.00440	01 00004000	•
ſ	750	STRAIGHT TIME BASE	D170	OTHER ADMINISTRATIVE & PROFE	C2428	Transportation	0.88934 [SYS 06140 Linear		Hours
L	Factors	50 Hours	I F1/U	IOTHER ADMINISTRATIVE & PROFE	U2423	Transportation	Lilleal	44.47	Inouis
	i actors	30 110013					0.88934 [SYS 06140	ni 88934200 - 9	System
	750	STRAIGHT TIME BASE	S020	ENVIRONMENTAL SCIENTISTS	C103S	Environmental Compliance	Linear		Hours
	Factors	30 Hours							
-							0.88934 [SYS 06140	01 .88934200 - 3	Svstem
L	750	STRAIGHT TIME BASE	S020	ENVIRONMENTAL SCIENTISTS	C103S	Environmental Compliance	Linear	44.47	Hours
	Factors	50 Hours							
F		T					0.88934 [SYS 06140		
L	A5C	SUPPLIES	0000	NONE	C104S	Closure Management	Linear	90.268.21	Dollars
	Factors	100000 Dollars (SCO Containers)		1.015 FY00 Escalation					•
-			•	.			0.88934 [SYS 06140	<u>01 .88934200 - S</u>	System

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1EEC05 Proiect Baseline Devl **Rocky Flats Closure Project** 1EEC5002 WBS Filter 1EEC **Baseline Cost and Basis of Estimate** Activity Filter

						Daseille Cost at	iu basis	oi Estillate	Activity Filter	k	Starts In FY *
	A5C	SUPPLIES		0000	NONE		C104S	Closure Management		Linear	45.134.11 Dollars
I	actors	50000	Dollars (2000 lb. Fork Truck	()	1.015	FY00 Escalation			•		

0.88934 [SYS 061400] .88934200 - System E130 OTHER ENGINEERS C104S Closure Management A5H SUBCONTRACTED SRVS 2.504.25 Dollars Linear Prime Dollars 1.02283 -- FY00 Escalation --Factors 2753

0.88934 [SYS 061400] .88934200 - System T050 RADIATION CONTROL TECHNOLIGI | KE10H | Indust/Site Srvs Steelworkers A5H SUBCONTRACTED SRVS Linear 12.574.94 Dollars

300 46.08 Dollars per Hour 1.02283 -- FY00 Escalation --Factors Hours

0.88934 [SYS 061400] .88934200 - System

BOE

WBS No:

Activity ID:

Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate.

Experience Item Desc - Additional Oversight, including record keeping, two deputy Project Managers and Administrative Support personnel. This activity was included in this WADlet to allow completion of all activities in a single fiscal year.

Breakdown of Cost Data:

Item - Record Keeping, Admin. Support and Two Deputy Project Managers

Units - 1) Hours

Line Item 15-1EMC230025 - Additional Oversight

Unit Cost - 1)7,240

Unit Cost Adjustment factor - None

Revised Unit Cost - N/A Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resource

ces		Cost	Element		Skill		Department	Curve	Quantity	Units
	750	STRAIGHT T	IME BASE	G010	ADMINISTRATIVE ASSISTANTS	C104S	Closure Management	Linear	1.609.71 H	lours
	Factors	1810 H	Hours							
-								0.88934 [SYS 061400	01 .88934200 - S ¹	vstem
	750	STRAIGHT T	IME BASE	G010	ADMINISTRATIVE ASSISTANTS	C104S	Closure Management	Linear	1.609.71 H	lours
	Factors	1810 H	Hours							
_								0.88934 [SYS 061400	01 .88934200 - S	vstem
	750	STRAIGHT T	IME BASE	M010	FOREMEN / TEAM LEADS / GROUP	C104S	Closure Management	Linear	1.609.71 H	lours
	Factors	1810 H	Hours							
_								0.88934 [SYS 061400	01 .88934200 - S	vstem
	750	STRAIGHT T	IME BASE	M010	FOREMEN / TEAM LEADS / GROUP	C104S	Closure Management	Linear	1.609.71 F	lours

Factors 1810 Hours Line Item 2-1EMC210025 - Disposition Used Pieces of Machinery with PREs

0.88934 [SYS 061400] .88934200 - System

BOE

Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate.

Experience Item Desc - Disposition Used Pieces of Machinery with PREs-Nine pieces of large machinery, residing in cargo containers.

Breakdown of Cost Data:

Item - Disposition Used Machinery with PREs

Units - 1)Hours 5)Dollars

Unit Cost - 1)70 2)6,997 Unit Cost Adjustment factor - None

Revised Unit Cost - N/A

Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es		Cost Element	Skill	Department	Curve	Ouantity	Units
	750	STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C104S Closure Management	Linear	12.85	Hours

Factors 40 Hours - Process Knowledge; Prepare 0.36123 May Earned Value Factor

0.88934 [SYS 061400] .88934200 - System

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WBS No: 1EEC05
Activity ID: 1EEC5002

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
WBS Filter
Activity Filter
*

Baseline Devl
Baseline Cost and Basis of Estimate

Activity Filter
*

				Baseline Cost an	iu basis	or Estimate Activity Fit	ter *		Starts In FY *
750	STRAIGHT TIME BA	SE P170	OTHER A	DMINISTRATIVE & PROFE	C242S	Transportation		Linear	3.21 Hours
Factors	10 Hours -	Fransportation	0.36123	May Earned Value Factor					
								0.88934 [SYS 06140	01 .88934200 - Svstem
A5H	SUBCONTRACTED	SRVS P030	BUYERS	PROCUREMENT AND CON	C104S	Closure Management		Linear	295.74 Dollars
Factors	45 estimate	d \$/hr - RMRS corp	20	Hours - Prepare Declaration	of	1.02283 FY00 Escalation		0.36123 May Earned	Value Factor
								0.88934 [SYS 06140	01 .88934200 - Svstem
A5H	SUBCONTRACTED	SRVS T050	RADIATIO	ON CONTROL TECHNOLIGI	KE10H	Indust/Site Srvs Steelworkers		Linear	1.817.00 Dollars
Factors	120 Hours -	Pre-Job Surveys	46.08	Dollars/Hour		1.02283 FY00 Escalation		0.36123 May Earned	Value Factor
								0.88934 [SYS 06140	01 .88934200 - Svstem
A5L	RENTALS	0000	NONE		C104S	Closure Management		Linear	1.324.23 Dollars

Factors 1467 Crane Rental - Banding & Shipping 1.015 -- FY00 Escalation --

Line Item 2-1EMC230025 - Complete RCRA Closure

BOE

Estimators Experience - Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate. Experience Item Desc - Three sumps, three tanks and associated piping were deferred from from original RCRA Closure.

Breakdown of Cost Data: Item - Completion of RCRA Closure Units - 1)Hours 2)Dollars Unit Cost - 1)4,400 2)53,824 Unit Cost Adjustment factor - None Revised Unit Cost - None

Revised Unit Cost - None Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

3	Cost Element	Skill	Department	Curve	Quantity Units
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	266.80 Hours
Factors	300 Hours				
				0.88934 [SYS 06140	
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	177.87 Hours
Factors	200 Hours				
	1			0.88934 [SYS 06140	
750	STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	177.87 Hours
Factors	200 Hours				
	T			0.88934 [SYS 06140	
750	STRAIGHT TIME BASE	E070 MECHANICAL ENGINEERS	C104S Closure Management	Linear	355.74 Hours
Factors	400 Hours				
	T	T	T	0.88934 [SYS 06140	
750	STRAIGHT TIME BASE	L060 MISSION SUP SPEC II (FLTTCH. WS	KE10H Indust/Site Srvs Steelworkers	Linear	355.74 Hours
Factors	400 Hours				
	I	T I	T.,	0.88934 [SYS 06140	
750	STRAIGHT TIME BASE	L060 MISSION SUP SPEC II (FLTTCH. WS	KE10H Indust/Site Srvs Steelworkers	Linear	355.74 Hours
Factors	400 Hours				
	OTD 410117 TH 45 D 4 0 5		1/5 (01) 1 1/0): 0 0 1 1	0.88934 [SYS 06140	
750	STRAIGHT TIME BASE	L070 MISSION SUP SPEC III	KE10H Indust/Site Srvs Steelworkers	Linear	533.61 Hours
Factors	600 Hours				
750	OTD A IOLIT TIME DAGE	MOOD MANAGERO (ORARE OD TO)	04040 01 14	0.88934 [SYS 06140	
750	STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C104S Closure Management	Linear	125.40 Hours
Factors	141 Hours			0.00004 [0)/0.00440	01 00004000 0 4
750	OTD A IOLIT TIME DAGE	DOES COMPLIANCE INCRESTORS	04040 01 14	0.88934 [SYS 06140	
750	STRAIGHT TIME BASE	P050 COMPLIANCE INSPECTORS	C104S Closure Management	Linear	177.87 Hours
Factors	200 Hours			0.00004 [0)/0.00440	01 00004000 0
				0.88934 [SYS 06140	UI .88934200 - System

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 WBS No:
 1EEC05
 Rocky Flats Closure Project
 Project
 Baseline Devi

 Activity ID:
 1EEC5002
 Baseline Cost and Basis of Estimate
 WBS Filter Activity Filter
 1EEC

				Daseille Oost al	iu Dasis	Ac Ac	ctivity Filter *	Starts In FY *
750	STRAIGHT	TIME BASE	P090	INDUSTRIAL HYGIENISTS	C104S	Closure Management	Linear	177.87 Hours
Factors	200	Hours						
					,		0.88934 [SYS 061400	01 .88934200 - Svstem
750	STRAIGHT	TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C242S	Transportation	Linear	88.93 Hours
Factors	100	Hours						
				1	T		0.88934 [SYS 061400	01 .88934200 - Svstem
750	STRAIGHT	TIME BASE	S020	ENVIRONMENTAL SCIENTISTS	C103S	Environmental Compliance	Linear	889.34 Hours
Factors	1000	Hours						
					,		0.88934 [SYS 061400	01 .88934200 - Svstem
A5C	SUPPLIES		0000	NONE	C104S	Closure Management	Linear	18.053.64 Dollars
Factors	20000	Dollars		1.015 FY00 Escalation				
					,		0.88934 [SYS 061400	01 .88934200 - Svstem
A5H	SUBCONT	RACTED SRVS	S010	CHEMISTS	C103S	Environmental Compliance	Linear	18.192.91 Dollars
Factors	20000	Dollars		1.02283 FY00 Escalation				
							0.88934 [SYS 061400	01 .88934200 - Svstem
A5H	SUBCONT	RACTED SRVS	T050	RADIATION CONTROL TECHNOLIGI	KE10H	Indust/Site Srvs Steelworkers	Linear	12.574.94 Dollars
Factors	300	Hours		46.08 Dollars/Hr.		1.02283 FY00 Escalation		
							0.88934 [SYS 061400	0] .88934200 - System

Line Item 3-1EMC210025 - Disposition Used Machinery without PREs

BOE

Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate.

Experience Item Desc - Disposition Used Machinery without PREs

Breakdown of Cost Data:

Item - Used Machinery Disposition
Units - 1)Hours 2)Dollars

Unit Cost - 1)175 2)4,843

Unit Cost Adjustment factor - None

Revised Unit Cost - N/A

Basis for adjustment -N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	L060 MISSION	SUP SPEC II (FLTTCH. WS	KE10H	Indust/Site Srvs Steelworkers	Linear	16.06	Hours
Factors	50 Hours - Waste Packaging	0.3612	May Earned Value Factor					
_						0.88934 [SYS 0614	001 .88934200 - S	vstem
750	STRAIGHT TIME BASE	L060 MISSION	SUP SPEC II (FLTTCH. WS	KE10H	Indust/Site Srvs Steelworkers	Linear	9.64	Hours
Factors	30 Hours - Waste Inspection/C	Certification 0.3612	May Earned Value Factor					
						0.88934 [SYS 0614	001 .88934200 - S	vstem
750	STRAIGHT TIME BASE	M020 MANAGE	RS (GRADE 69 - 72)	C104S	Closure Management	Linear	11.24	Hours
Factors	35 Hours - Process Knowledge	e: Prepare 0.3612	May Earned Value Factor					
		· · · · · · · · · · · · · · · · · · ·		ı		0.88934 [SYS 0614	001 .88934200 - S	vstem
750	STRAIGHT TIME BASE	P170 OTHER	ADMINISTRATIVE & PROFE	C104S	Closure Management	Linear	12.85	Hours
Factors	40 Hours - Maintenance Plann	ers 0.3612	3 May Earned Value Factor					
		, ,		T		0.88934 [SYS 0614	001 .88934200 - S	vstem
750	STRAIGHT TIME BASE	P170 OTHER	ADMINISTRATIVE & PROFE	C242S	Transportation	Linear	6.43	Hours
Factors	20 Hours - Transport Supplies	/Waste 0.3612	B May Earned Value Factor					
		I I		1	T	0.88934 [SYS 0614	001 .88934200 - S	vstem
A5C	SUPPLIES	0000 NONE		C104S	Closure Management	Linear	978.24	Oollars
Factors	3000 Crates, Liners, Banding	1.015	FY00 Escalation		0.36123 May Earned Value Factor			
_		, ,		T		0.88934 [SYS 0614	001 .88934200 - S	vstem
A5H	SUBCONTRACTED SRVS	T050 RADIATI	ON CONTROL TECHNOLIGI	KE10H	Indust/Site Srvs Steelworkers	Linear	605.67	Dollars
Factors	40 Hours - Pre-Job Surveys	46.08	Dollars/Hr.		1.02283 FY00 Escalation	0.36123 May Earned	d Value Factor	
						0.88934 [SYS 0614	00] .88934200 - S	ystem

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter 1EEC Activity Filter *

Starts In FY

Line Item 3-1EMC230025 - Disconnect Remove CO2 System

BOE

Estimators Experience - Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate. Experience Item Desc - The former fire suppression system in SE corner of B.865, currently out of service, must be removed.

Breakdown of Cost Data:

Item - Disconnect/Remove CO2 System

Units - 1)Hours 2)Dollars Unit Cost - 1)650 2)9,608

Unit Cost Adjustment factor - None

Revised Unit Cost - None Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es			ost Element			Skill		Department		Curve	Ouantity	Units
	750	STRAIGH	TIME BASE	C010	CARPEN	TERS	KE10H	Indust/Site Srvs Steelworkers		Linear	35.57	Hours
Fa	ctors	40	Hours									
_									0.8	88934 [SYS 061400	01 .88934200 - S	System
	750	STRAIGH	TIME BASE	C020	ELECTRI	CIANS	KE10H	Indust/Site Srvs Steelworkers		Linear	35.57	Hours
Fa	ctors	40	Hours									
								T	0.8	88934 [SYS 061400	01 .88934200 - S	Svstem
L	750	STRAIGH	TIME BASE	C080	PLUMBE	RS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers		Linear	35.57	Hours
Fa	ctors	40	Hours									
					1		T	T	0.8	88934 [SYS 061400	01 .88934200 - S	System
L	750	STRAIGH	TIME BASE	E020	CIVIL EN	GINEERS	C104S	Closure Management		Linear	88.93	Hours
Fa	ctors	100	Hours									
					1			T	0.8	88934 [SYS 061400		
	750	STRAIGH	TIME BASE	E120	SAFETY	ENGINEERS	C104S	Closure Management		Linear	8.89	Hours
Fa	ctors	10	Hours									
					1			T	0.8	88934 [SYS 061400		
	750	STRAIGH	TIME BASE	M020	MANAGE	RS (GRADE 69 - 72)	C104S	Closure Management		Linear	31.13	Hours
Fa	ctors	35	Hours									
					1		ı	T	0.8	88934 [SYS 061400		
	750		TIME BASE	P070	COST ES	TIMATORS PLANNERS AN	C200S	Engineering Services		Linear	88.93	Hours
Fa	ctors	100	Hours									
					1		I	T	3.0	88934 [SYS 061400		
	750		TIME BASE	P090	INDUSTR	IAL HYGIENISTS	C104S	Closure Management		Linear	88.93	Hours
Fa	ctors	100	Hours									
									3.0	88934 [SYS 061400		
	750		TIME BASE	P170	OTHER A	DMINISTRATIVE & PROFE	C242S	Transportation		Linear	17.79	Hours
Fa	ctors	20	Hours									
					1		ı		3.0	88934 [SYS 061400		
			RACTED SRVS			ARDS AND OTHER SECURI	C242S			Linear	4.093.41	Dollars
Fa	ctors	45	estimated \$/hr - RMRS Cor	p	100	Hours		1.02283 FY00 Escalation				
									3.0	88934 [SYS 061400		
I	\5H_		RACTED SRVS	T050			KE10H	Indust/Site Srvs Steelworkers		Linear	4.191.65	Dollars
Fa	ctors	100	Hours		46.08	Dollars/Hr.		1.02283 FY00 Escalation				
					1				3.0	88934 [SYS 061400		
		RENTALS		0000	NONE		C104S	Closure Management		Linear	4.513.41	Dollars
Fa	ctors	5000	Dollars		1.015	FY00 Escalation						

Line Item 4-1EMC210025 - Empty Carpenters Shop

BOE

Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance

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Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter

Baseline Devl 1EEC

Starts In FY

Activity Filter coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate. Experience Item Desc - Empty Carpenter's Shop Located South of B.865 Breakdown of Cost Data: Item - Carpenter's Shop Units - 1) Hours 2) Dollars Unit Cost - 1)180 2)3,304 Unit Cost Adjustment factor - None Revised Unit Cost - N/A Basis for adjustment -N/A This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s	Cost Element		Skill		Department	Curve	Ouantity Units
75	0 STRAIGHT TIME BASE	E050 EN	NVIRONMENTAL ENGINEERS	C104S	Closure Management	Linear	9.64 Hours
Facto	ors 30 Hours - Banding & Shipping	g Waste 0	0.36123 May Earned Value Factor				
						0.88934 [SYS 06140	001 .88934200 - Svstem
75	0 STRAIGHT TIME BASE	L060 MI	ISSION SUP SPEC II (FLTTCH. WS	KE10H	Indust/Site Srvs Steelworkers	Linear	6.43 Hours
Facto	ors 20 Hours - WGI; Waste Certifi	cation (0.36123 May Earned Value Factor				
					1	0.88934 [SYS 06140	001 .88934200 - Svstem
75	0 STRAIGHT TIME BASE	L060 MI	ISSION SUP SPEC II (FLTTCH. WS	KE10H	Indust/Site Srvs Steelworkers	Linear	20.88 Hours
Facto	ors 65 Hours - Waste Packaging	C	0.36123 May Earned Value Factor				
							001 .88934200 - Svstem
75	0 1011011011111111111111111111111111111			KE10H	Indust/Site Srvs Steelworkers	Linear	11.24 Hours
Facto	ors 35 Hours - Waste Inspection	C	0.36123 May Earned Value Factor				
							001 .88934200 - Svstem
75			ANAGERS (GRADE 69 - 72)	C104S	Closure Management	Linear	9.64 Hours
Facto	ors 30 Hours - Process Knowledge	e: Proiect C	0.36123 May Earned Value Factor				
		,				0.88934 [SYS 06140	001 .88934200 - Svstem
A5	C SUPPLIES	0000 NC	ONE	C104S	Closure Management	Linear	902.68 Dollars
Facto	ors 1000 Crates, Liners, Banding, et	c. 1	1.015 FY00 Escalation				
					1	0.88934 [SYS 06140	001 .88934200 - Svstem
A5	H SUBCONTRACTED SRVS	T050 RA	ADIATION CONTROL TECHNOLIGI	KE10H	Indust/Site Srvs Steelworkers	Linear	454.25 Dollars
Facto	ors 30 Hours - Pre-Job Surveys	Δ	46.08 Dollars/Hour		1.02283 FY00 Escalation	0.36123 May Earned	Value Factor
	T	т			1	0.88934 [SYS 06140	001 .88934200 - Svstem
A5	H SUBCONTRACTED SRVS	T050 RA	ADIATION CONTROL TECHNOLIGI	KE10H	Indust/Site Srvs Steelworkers	Linear	302.83 Dollars
Facto	ors 20 Hours - Submit RWP Requ	iests 4	46.08 Dollars/Hour		1.02283 FY00 Escalation	0.36123 May Earned	Value Factor
						0.88934 [SYS 06140	001 .88934200 - System

Line Item 4-1EMC230025 - Close and Decontaminate Met. Labs

BOE

Estimators Experience - Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate. Experience Item Desc - Rooms 106 & 108, a former metrology lab & currently an RMA, must be cleaned & decontaminated. Breakdown of Cost Data: Item - Close and Decontaminate Rooms 106 & 108. Units - 1) Hours 2) Dollars

Unit Cost - 1)3,610 2)42,648 Unit Cost Adjustment factor - None

Revised Unit Cost - N/A Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es	S Cost Element		Skill			Department	Curve	Quantity	Units
	750	STRAIGHT TIME BASE	C010 C	ARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	266.80	Hours
	750	STRAIGHT HIVE BASE	COTO ICA	ANI LIVILIO	IXE IVII	IIIdds/Oile Oivs OleelWorkers	Lilleal	200.00	illouis

300 Hours Factors

Rockv Flats Closure Project Baseline Cost and Basis of Estimate Proiect
WBS Filter

Baseline Devl 1EEC

				- Basellile Cost al	iu Dasis	OI Estillate	Activity Filter '		Starts In FY *
750		TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworker		Linear	177.87 Hours
Factors	200	Hours							
750	0.70 410: :7	TIME DAGE	0000	DI LIMBERO AND DIRECTES	1/540::	1 1 1/07 0 01 1		0.88934 [SYS 061400	
	200	TIME BASE Hours	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworker	rs	Linear	177.87 Hours
Factors	200	nouis						0.88934 [SYS 061400	01 88934200 - System
750	STRAIGHT	TIME BASE	E070	MECHANICAL ENGINEERS	C104S	Closure Management		Linear	355.74 Hours
Factors	400	Hours							
	1		1			1	1	0.88934 [SYS 061400	
750		TIME BASE	L060	MISSION SUP SPEC II (FLTTCH. WS	KE10H	Indust/Site Srvs Steelworker	rs	Linear	355.74 Hours
Factors	400	Hours						0.00004 [0)/0.00440	01 00004000 0 4
750	STRVICHT	TIME BASE	L060	MISSION SUP SPEC II (FLTTCH. WS	KE10H	Indust/Sita Save Stackwarker	re	0.88934 [SYS 061400 Linear	01.88934200 - System 80.04 Hours
Factors	90	Hours	LUGU	IWISSION SUP SPEC II (FLITCH, WS	KETUH	illidusi/Sile Sivs Sleeiworkei	5	Lilleai	00.04IFI0UIS
acrors.	00	110010						0.88934 [SYS 061400	01 .88934200 - Svstem
750	STRAIGHT	TIME BASE	L070	MISSION SUP SPEC III	KE10H	Indust/Site Srvs Steelworker	rs	Linear	533.61 Hours
Factors	600	Hours							
	I			I		1		0.88934 [SYS 061400	
		TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C104S	Closure Management		Linear	156.52 Hours
Factors	176	Hours						0.88934 [SYS 061400	01 99034200 Systom
750	STRAIGHT	TIME BASE	P090	INDUSTRIAL HYGIENISTS	C104S	Closure Management		0.86934 1313 001400 Linear	177.87 Hours
Factors	200	Hours		11.15.60.11.11.11.11.11.11.11.11.11	0.0.0	o.ooa.o manaqomone	<u>"</u>	Ziiiodi	
			,					0.88934 [SYS 061400	
750		TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C242S	Transportation		Linear	17.79 Hours
Factors	20	Hours							
750	CTDAICLIT	TIME BASE	5000	ENVIRONMENTAL SCIENTISTS	C402C	Environmental Compliance		0.88934 [SYS 061400	0 .88934200 - System 177.87 Hours
750 Factors	200	Hours	5020	ENVIRONMENTAL SCIENTISTS	C103S	Environmental Compliance		Linear	177.87 Hours
ruciors	200	riouis						0.88934 [SYS 061400	01 88934200 - System
A5C	SUPPLIES		0000	NONE	C104S	Closure Management		Linear	4.513.41 Dollars
Factors	5000	Dollars		1.015 FY00 Escalation					
				1				0.88934 [SYS 061400	
		RACTED SRVS	E130	OTHER ENGINEERS	C105S	Work Control Center		Linear	7.512.76 Dollars
Factors	8259	Prime Dollars		1.02283 FY00 Escalation				0.88934 [SYS 06140]	01 00004000 Cyatam
A5H	SUBCONT	RACTED SRVS	P140	SAFEGUARDS AND OTHER SECURI	C242S	Transportation		Linear	8.186.81 Dollars
Factors	45	estimated \$/hr - RMRS Cor		200 Hours	02720	1.02283 FY00 Escalation	า	Lincai	0.100.011D0lla13
	-						,	0.88934 [SYS 06140	
A5H		RACTED SRVS	S010	CHEMISTS	C103S	Environmental Compliance		Linear	9.096.46 Dollars
	10000	Dollars		1.02283 FY00 Escalation					
Factors								0.88934 [SYS 061400	01 .88934200 - Svstem
Factors	01.10.00::-	D. OTED OD //O	T0 =6	DARLATION CONTROL TECHNICION	1/5 10::				
A5H Factors	SUBCONT 600	RACTED SRVS Hours	T050	RADIATION CONTROL TECHNOLIGI 46.08 Dollars/Hr.	KE10H	Indust/Site Srvs Steelworker 1.02283 FY00 Escalation		Linear	25.149.88 Dollars

Line Item 5-1EMC210025 - Remove Carpenters Shop

BOE

Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate.

Experience Item Desc - Remove Carpenters' Shop Located South of B.865.

Breakdown of Cost Data:

Item - Remove Carpenter's Shop located South of B.865.

Units - 1) Hours 6) Dollars

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 WBS No:
 1EEC05
 RC

 Activity ID:
 1EEC5002
 Bas

Rockv Flats Closure Project

Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
*

Baseline Devl
1EEC
*

*

**

Starts In FY *

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Unit Cost - 1)155 2)2,500 Unit Cost Adjustment factor - None Revised Unit Cost - N/A Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

es	Cost Element	Skill		Department	Curve	Ouantity Units
75	0 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	9.64 Hours
Facto	ors 30 Hours - Craft Labor	0.36123 May Earned Value Factor				
_					0.88934 [SYS 0614	001 .88934200 - Svstem
75	0 STRAIGHT TIME BASE	E040 ELECTRICAL ENGINEERS	C104S	Closure Management	Linear	16.06 Hours
Facto	ors 50 Hours - Disconnect Electric	cal Supply 0.36123 May Earned Value Factor				
_					0.88934 [SYS 0614	001 .88934200 - Svstem
75	0 STRAIGHT TIME BASE	E120 SAFETY ENGINEERS	C104S	Closure Management	Linear	6.43 Hours
Facto	ors 20 Hours - LO/TO Documenta	ation 0.36123 May Earned Value Factor				
					0.88934 [SYS 0614	001 .88934200 - Svstem
75	0 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C104S	Closure Management	Linear	6.43 Hours
Facto	ors 20 Hours - Project Manageme	ent & 0.36123 May Earned Value Factor				
					0.88934 [SYS 0614	001 .88934200 - Svstem
A5	H SUBCONTRACTED SRVS	0000 NONE	C104S	Closure Management	Linear	328.59 Dollars
Facto	ors 1000 Sanitary Landfill Disposal 0	Costs 1.02283 FY00 Escalation		0.36123 May Earned Value Factor		
					0.88934 [SYS 0614	001 .88934200 - Svstem
A5	H SUBCONTRACTED SRVS	E130 OTHER ENGINEERS	C104S	Closure Management	Linear	478.78 Dollars
Facto	ors 1457.05 Prime Dollars	1.02283 FY00 Escalation		0.36123 May Earned Value Factor		
					0.88934 [SYS 0614	001 .88934200 - Svstem
A5	R MISC EXPENSES	0000 NONE	C104S	Closure Management	Linear	489.12 Dollars
Facto	ors 1500 Lease Roll-Off	1.015 FY00 Escalation		0.36123 May Earned Value Factor		

Line Item 5-1EMC230025 - Remove Cooling Loop, CT#4 & Heat Exchanger

Basis for adjustment - N/A

BOE

Estimators Experience - Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to 8.865 deem historical costs unreliable as a basis for estimate.

Experience Item Desc - Cooling system in place to cool hip press and heat exchanger with water, must be properly disposed.

Breakdown of Cost Data:

Item - Remove Cooling Loop, CT#4 & Heat Exchanger
Units - 1)Hours 2)Dollars
Unit Cost - 1)3,320 2)69,432
Unit Cost Adjustment factor - None
Revised Unit Cost - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s	Cost Element		Skill		Department	Curve	<i>Ouantity</i>	Units
7	50 STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear		Hours
Fac	tors 300 Hours							
						0.88934 [SYS 061400	01 .88934200 - \$	Svstem
7	50 STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	177.87	Hours
Fac	tors 200 Hours							
						0.88934 [SYS 061400	01 .88934200 - \$	Svstem
7	50 STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	533.61	Hours
Fac	tors 600 Hours							
						0.88034 [SVS 061400	N 88034200 - 9	System

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Rockv Flats Closure Project Baseline Cost and Basis of Estimate Proiect
WBS Filter
Activity Filter

Baseline Devl 1EEC

1220002	Baseline Cost and I	3asis of Estimate	Activity Filter *	Starts In FY *
750 STRAIGHT TIME BASE	E070 MECHANICAL ENGINEERS C	104S Closure Management	Linear	355.74 Hours
Factors 400 Hours				
TEO OTDAIGUIT TIME DAGE	LOGO MICCION CUE OPEO IL CELTTOU MO LA	<u></u>		001 .88934200 - Svsten 355.74 Hours
750 STRAIGHT TIME BASE actors 400 Hours	L060 MISSION SUP SPEC II (FLTTCH. WS K	E10H IIndust/Site Srvs Steelworke	ers Linear	355./4IHours
actors 400 Hours			0.88934 ISYS 0614	001 .88934200 - Svster
750 STRAIGHT TIME BASE	L060 MISSION SUP SPEC II (FLTTCH, WS K	E10H Indust/Site Srvs Steelwork		80.04 Hours
Factors 90 Hours				
				001 .88934200 - Svster
750 STRAIGHT TIME BASE	L070 MISSION SUP SPEC III K	E10H Indust/Site Srvs Steelworke	ers Linear	266.80 Hours
Factors 300 Hours			0.0000 4 .0000 0	001 00004000 0
750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72) C	104S Closure Management	0.88934 ISTS 0614 Linear	.001 .88934200 - Svster 156.52 Hours
Factors 176 Hours	I WOZO IWANAOLINO TONADE 09 - 121	1040 lolosure Management	Lilledi	130.32111001
			0.88934 [SYS 0614	001 .88934200 - Svster
750 STRAIGHT TIME BASE	P090 INDUSTRIAL HYGIENISTS C	104S Closure Management	Linear	177.87 Hours
Factors 200 Hours				
				001 .88934200 - Svste
750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE C	240S Traffic/Transportation	Linear	88.93 Hours
Factors 100 Hours			0.88034 [575.0614	001 .88934200 - Svste
750 STRAIGHT TIME BASE	S020 ENVIRONMENTAL SCIENTISTS C	103S Environmental Compliance		88.93 Hour
Factors 100 Hours	1 0010 [2.11110.1111111111111111111111111111111			
			0.88934 [SYS 0614	00] .88934200 - Syste
750 STRAIGHT TIME BASE	S030 GEOLOGISTS C	103S Environmental Compliance	e Linear	71.15 Hour
Factors 80 Hours			2 2222 4 721/2 2244	
A5C SUPPLIES	0000 NONE C	104S Closure Management	0.88934 ISYS 0614 Linear	00] .88934200 - System 9.026.82 Dolla
Factors 10000 Dollars	1.015 FY00 Escalation	1043 Closure Management	Lilledi	9,020.02 D0 a
actors 10000 Bollaro	1.010 1100 20001011011		0.88934 [SYS 0614	.00] .88934200 - Syste
A5H SUBCONTRACTED SRVS	E130 OTHER ENGINEERS C	105S Work Control Center	Linear	1.252.13 Dolla
Factors 1376.5 Prime Dollars	1.02283 FY00 Escalation			
				001 .88934200 - Svste
A5H SUBCONTRACTED SRVS		103S Environmental Compliance	e Linear	9.096.46 Dolla
Factors 10000 Dollars	1.02283 FY00 Escalation		1120 2721 12000 0	.001 .88934200 - Svster
A5H SUBCONTRACTED SRVS	S010 CHEMISTS C	103S Environmental Compliance		27.289.37 Dolla
Factors 30000 Dollars	1.02283 FY00 Escalation	1033 Environmental Combilance	Lilleal	21.209.31 IDUIIa
acions dodd Dollard	1.02200 1 100 20000001		0.88934 [SYS 0614	001 .88934200 - Svste
A5H SUBCONTRACTED SRVS	T050 RADIATION CONTROL TECHNOLIGI K	E10H Indust/Site Srvs Steelworke		
Factors 400 Hours	46.08 Dollars/Hr.	1.02283 FY00 Escalation		
				001 .88934200 - Svste
A5L RENTALS		104S Closure Management	Linear	902.68 Dolla
Factors 1000 Dollars	1.015 FY00 Escalation			

Line Item 6-1EMC210025 - Empty/Consolidate Four Cargo Containers

BOE

Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate.

Experience Item Desc - Empty & Consolidate Four Cargo Containers

Breakdown of Cost Data:

Item - Empty/Consolidate Four Cargo Containers

Units - 1) Hours 2) Dollars

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WBS No: 1EEC05 **Rocky Flats Closure Project** 1EEC5002 Activity ID: **Baseline Cost and Basis of Estimate**

Baseline Devl Proiect 1EEC WBS Filter Activity Filter

Starts In FY *

0.36123 May Earned Value Factor

0.88934 [SYS 061400] .88934200 - System

Units

Unit Cost - 1)365 2)6,965 Unit Cost Adjustment factor - None Revised Unit Cost - N/A Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

3	Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	Siwii Siwii	KE10H Indust/Site Srvs Steelworkers	Linear	12.85	
Factors		ary Lighting 0.36123 May Earned Value Factor	TRETOTT IIIIddSVOILE OLVS OLCCIWOLICIS	Ellical	12.001	ilouis
1 uciors	40 Flours Electricians, Admin	ary Eighting 0.50125 May Earned Value Factor		0.88934 [SYS 06140	01 .88934200 - S	System
750	STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	C104S Closure Management	Linear	28.91	Hours
Factors	90 Hours - Banding, Storing ar	nd 0.36123 May Earned Value Factor				
				0.88934 [SYS 06140	01 .88934200 - S	System
750	STRAIGHT TIME BASE	L060 MISSION SUP SPEC II (FLTTCH, WS	KE10H Indust/Site Srvs Steelworkers	Linear	25.70	Hours
Factors	80 Hours - Waste Packaging	0.36123 May Earned Value Factor				
				0.88934 [SYS 06140	01 .88934200 - S	System
750	STRAIGHT TIME BASE	L060 MISSION SUP SPEC II (FLTTCH, WS	KE10H Indust/Site Srvs Steelworkers	Linear	8.03	Hours
Factors	25 Hours - Prepare Travelers:	: Waste 0.36123 May Earned Value Factor				
_				0.88934 [SYS 06140	01 .88934200 - S	System
750	STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C103S Environmental Compliance	Linear	12.85	Hours
Factors	40 Hours - Process Knowledge	ie: 0.36123 May Earned Value Factor				
				0.88934 [SYS 06140	01 .88934200 - 5	System
A5C	SUPPLIES	0000 NONE	C104S Closure Management	Linear	3.791.26	Dollars
Factors	4200 Auxiliary Lighting; Waste C	Crates, 1.015 FY00 Escalation				
_				0.88934 [SYS 06140	01 .88934200 - S	System
A5H	SUBCONTRACTED SRVS	E130 OTHER ENGINEERS	C104S Closure Management	Linear	2.620.60	Dollars
Factors	2880.9 Prime Dollars	1.02283 FY00 Escalation				
				0.88934 [SYS 06140	01 .88934200 - S	System
A5H	SUBCONTRACTED SRVS	T050 RADIATION CONTROL TECHNOLIGI	KE10H Indust/Site Srvs Steelworkers	Linear	908.50	Dollars

Line Item 6-1EMC230025 - Remove Equipment-Cold Machine Shop

60

BOE

Factors

Estimators Experience - Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate. Experience Item Desc - Large stationary power tools, wired into the electrical system, generating approximately 20 waste crates. Breakdown of Cost Data:

1.02283 -- FY00 Escalation --

Item - Remove Equipment-Cold Machine Shop

Hours - Pre-Job Surveys

Units - 1) Hours 2) Dollars Unit Cost - 1)3,100 2) 68,432 Unit Cost Adjustment factor - None Revised Unit Cost - N/A Basis for adjustment - N/A

Cost Element

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

46.08 Dollars/Hour

Resources

750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	266.80 Hours
Factors 300 Hours				
			0.88934 [SYS 061400	01 .88934200 - System
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	266.80 Hours
Factors 300 Hours				

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Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Proiect
WBS Filter

Baseline Devl 1EEC

				. Daseille Cost al	iu Dasis	OI Estimate	Activity Filter	•	Starts In FY *
750	STRAIGH	T TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers		Linear	177.87 Hours
Factors	200	Hours							
	07041011				01010			0.88934 [SYS 061400	
	400	T TIME BASE	E070	MECHANICAL ENGINEERS	C104S	Closure Management		Linear	355.74 Hours
Factors	400	Hours						0.88934 [SYS 061400	1 99034300 Systom
750	STRAIGH	T TIME BASE	1.060	MISSION SUP SPEC II (FLTTCH, WS	KF10H	Indust/Site Srys Steelworkers		0.86934 1313 001400 Linear	266.80 Hours
actors	300	Hours		INIOGIOIT COL CI EO II II EL LOLI. TVO	- IXE 1011	THOUSE SILE SITE STORMS TROIT	'	Linoui	200.001110010
				,				0.88934 [SYS 061400	
750	STRAIGH	T TIME BASE	L060	MISSION SUP SPEC II (FLTTCH. WS	KE10H	Indust/Site Srvs Steelworkers		Linear	88.93 Hours
actors	100	Hours							
			T	L		T		0.88934 [SYS 061400	
		T TIME BASE	L070	MISSION SUP SPEC III	KE10H	Indust/Site Srvs Steelworkers		Linear	266.80 Hours
actors	300	Hours						0.88934 [SYS 061400	1 99034300 Systom
750	STRAIGH	T TIME BASE	MO20	MANAGERS (GRADE 69 - 72)	C104S	Closure Management		0.86934 1313 001400 Linear	125.40 Hours
actors	141	Hours	I MOZO	IIII II I	. 01010	Ologio Managoment		Linoui	120. 1011 10410
							<u> </u>	0.88934 [SYS 061400	01 .88934200 - Svstem
750	STRAIGH	T TIME BASE	P090	INDUSTRIAL HYGIENISTS	C104S	Closure Management		Linear	266.80 Hours
actors	300	Hours							
	T		1	T				0.88934 [SYS 061400	
	•	T TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C242S	Transportation		Linear	88.93 Hours
actors	100	Hours						0.88934 [SYS 061400	1 00024200 System
750	STRAIGH	T TIME BASE	5020	ENVIRONMENTAL SCIENTISTS	C103S	Environmental Compliance		Linear	88.93 Hours
actors	100	Hours	0020	JENVINONWENT/AL GOIENTIOTO	01000	Environmental Compilance		Linear	00.00 10013
								0.88934 [SYS 061400	0] .88934200 - System
A5C	SUPPLIES	3	0000	NONE	C104S	Closure Management		Linear	9,026.82 Dollars
actors	10000	Dollars		1.015 FY00 Escalation					
			1	1		I		0.88934 [SYS 061400	
	SUPPLIES		S010	ICHEMISTS 5,400 F 1 1	C103S	Environmental Compliance		Linear	18.053.64 Dollars
actors	20000	Dollars		1.015 FY00 Escalation				0.88934 [SYS 061400	1 00024200 System
A5H	SLIBCONT	TRACTED SRVS	F130	OTHER ENGINEERS	C105S	Work Control Center		U.88934 1515 061400 Linear	7.512.76 Dollars
actors	8259	Prime Dollars	L L 130	1.02283 FY00 Escalation	01000	Work Control Center		Lilleal	7.512.70ID0IIa13
aciors	0200	Timo Bollaro		1.52255 1 100 255alation				0.88934 [SYS 061400	01 .88934200 - System
A5H	SUBCONT	RACTED SRVS	S010	CHEMISTS	C103S	Environmental Compliance		Linear	18.192.91 Dollars
actors	20000	Dollars		1.02283 FY00 Escalation					
			1					0.88934 [SYS 061400	
		RACTED SRVS	T050	RADIATION CONTROL TECHNOLIGI	KE10H			Linear	16.766.59 Dollars
actors	400	Hours		46.08 Dollars/Hr.		1.02283 FY00 Escalation -	-	0.00004 100/0.004	21 00004000 0 :
								0.88934 [SYS 061400	ม .ชช934200 - System

Line Item 7-1EMC210025 - Survey/Remove Cargo Containers

BOE

Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate.

Experience Item Desc - Survey & Remove Cargo Containers Breakdown of Cost Data:

Item - Survey/Remove Cargo Containers

Units - 1)Dollars 2)Hours Unit Cost - 1)5,760 2)175

Unit Cost Adjustment factor - None

Revised Unit Cost - N/A Basis for adjustment - N/A

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WBS No: 1EEC05 Activity ID:

Factors 141

Hours

Rocky Flats Closure Project

Proiect WBS Filter Baseline Devl

1EEC5002 1EEC **Baseline Cost and Basis of Estimate** Starts In FY * This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions. Ouantity Resources Cost Element Department Curve Units STRAIGHT TIME BASE L060 MISSION SUP SPEC II (FLTTCH, WS | KE10H | Indust/Site Srvs Steelworkers 24.09 Hours Linear Hours - Remove Cargoes: Clean Area 0.36123 May Earned Value Factor Factors 0.88934 [SYS 061400] .88934200 - System P170 OTHER ADMINISTRATIVE & PROFE | C242S | Transportation 750 32 13 Hours STRAIGHT TIME BASE Linear 100 Hours - Transport Cargoes 0.36123 May Earned Value Factor Factors 0.88934 [SYS 061400] .88934200 - System A5H SUBCONTRACTED SRVS T050 RADIATION CONTROL TECHNOLIGI | KE10H | Indust/Site Srys Steelworkers 1.892.70 Dollars Linear 125 Hours - Pre-Job Survevs: 46.08 Dollars/Hour 1.02283 -- FY00 Escalation --0.36123 May Earned Value Factor Factors 0.88934 [SYS 061400] .88934200 - System Line Item 7-1EMC230025 - Equipment Removal Beryllium Shop Estimators Experience - Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & BOE decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate. Experience Item Desc - 16 large stationary power tools & 25 tool cabinets, toolboxes, and supplies. All must be shipped as low-level waste. Breakdown of Cost Data: Item - Equipment Removal Beryllium Shop Units - 1) Hours 2) Dollars Unit Cost - 1)3,100 2)76,472 Unit Cost Adjustment factor - None Revised Unit Cost - N/A Basis for adjustment - N/A This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions. Resources Cost Element **Ouantity** Units Department Curve 750 STRAIGHT TIME BASE C010 CARPENTERS KE10H Indust/Site Srvs Steelworkers Linear 177.87 Hours 200 Hours 0.88934 [SYS 061400] .88934200 - System 750 STRAIGHT TIME BASE C020 ELECTRICIANS KE10H Indust/Site Srvs Steelworkers 177.87 Hours Linear 200 Factors Hours 0.88934 [SYS 061400] .88934200 - System C080 PLUMBERS AND PIPEFITTERS 88.93 Hours 750 STRAIGHT TIME BASE KE10H Indust/Site Srvs Steelworkers Linear Factors 100 Hours 0.88934 [SYS 061400] .88934200 - System C120 D&D SKILLED TRADES KE10H Indust/Site Srvs Steelworkers 88.93 Hours 750 STRAIGHT TIME BASE Linear Factors 100 Hours 0.88934 [SYS 061400] .88934200 - System F070 MECHANICAL ENGINEERS 750 STRAIGHT TIME BASE C104S Closure Management 355 74 Hours Linear 400 Factors Hours 0.88934 [SYS 061400] .88934200 - System 750 STRAIGHT TIME BASE L060 MISSION SUP SPEC II (FLTTCH, WS | KE10H | Indust/Site Srvs Steelworkers 444.67 Hours Linear Factors 500 Hours 0.88934 [SYS 061400] .88934200 - System I 060 MISSION SUP SPEC II (FLTTCH, WS KE10H Indust/Site Srvs Steelworkers 750 STRAIGHT TIME BASE Linear 88.93 Hours Hours **Factors** 0.88934 [SYS 061400] .88934200 - System L070 MISSION SUP SPEC III 750 STRAIGHT TIME BASE KE10H Indust/Site Srvs Steelworkers Linear 266.80 Hours 300 Hours Factors 0.88934 [SYS 061400] .88934200 - System M020 MANAGERS (GRADE 69 - 72) C104S Closure Management 750 STRAIGHT TIME BASE Linear 125.40 Hours

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WBS No: 1EEC05 Baseline Devl Proiect Rocky Flats Closure Project 1EEC5002 1EEC Activity ID: WBS Filter **Baseline Cost and Basis of Estimate** Activity Filter 750 STRAIGHT TIME BASE P090 INDUSTRIAL HYGIENISTS C104S Closure Management Linear Factors 300 Hours 0.88934 [SYS 061400] .88934200 - System 750 STRAIGHT TIME BASE P170 OTHER ADMINISTRATIVE & PROFE | C242S | Transportation Linear 100 Hours Factors

		_		NONE	01010	0				40 = 40 00 =	
								0.88934	ISYS 06140	01.88934200 - Sv	stem
Factors	100	Hours									
750	STRAIGH'	T TIME BASE	S020	ENVIRONMENTAL SCIENTISTS	C103S	Environmental	Compliance	Line	ear	88.93H	ours

A5C SUPPLIES 0000 NONE C104S Closure Management 15000 Dollars -- FY00 Escalation --Factors 1.015

0.88934 [SYS 061400] .88934200 - System E130 OTHER ENGINEERS 7.512.76 Dollars A5H SUBCONTRACTED SRVS C105S Work Control Center Linear Factors 8259 Prime Dollars 1.02283 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - System A5H SUBCONTRACTED SRVS C103S Environmental Compliance 18.192.91 Dollars S010 CHEMISTS Linear

Factors 20000 Dollars 1.02283 -- FY00 Escalation --0.88934 [SYS 061400] .88934200 - System

37.724.83 Dollars A5H SUBCONTRACTED SRVS T050 RADIATION CONTROL TECHNOLIGI KE10H Indust/Site Srvs Steelworkers Linear Factors 900 Hours 46.08 Dollars/Hr. 1.02283 -- FY00 Escalation --

Line Item 8-1EMC230025 - Drain Fluids-Large Machines

BOE

Estimators Experience - Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate.

Experience Item Desc - 14 pieces of machinery in the CA, containing large amounts of oil, hydraulic fluid and other lubricants, must be drained, characterized and disposed.

Breakdown of Cost Data:

Item - Drain Fluids from Large Machines

Units - 1)Hours 2)Dollars Unit Cost - 1)1,700 2)38,200 Unit Cost Adjustment factor - None

Revised Unit Cost - N/A Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es		Cost Element		Skill	Department		Cu	rve	Ouantity	Units
7:	50 STRAI	GHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Line	ear	177.87	Hours
Faci	ors 200	Hours								
				1		T	0.88934	ISYS 061	4001 .88934200 - \$	Svstem
7	50 STRAI	GHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Line	ear	355.74	Hours
Faci	ors 400	Hours								
_								ISYS 061	4001 .88934200 - \$	Svstem
7	50 STRAI	GHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Line	ear	88.93	Hours
Faci	ors 100	Hours								
							0.88934	ISYS 061	4001 .88934200 - \$	Svstem
7	50 STRAI	GHT TIME BASE	L060	MISSION SUP SPEC II (FLTTCH. WS	KE10H	Indust/Site Srvs Steelworkers	Line	ear	88.93	Hours
Faci	ors 100	Hours								
							0.88934	ISYS 061	4001 .88934200 - \$	Svstem
7	50 STRAI	GHT TIME BASE	L060	MISSION SUP SPEC II (FLTTCH. WS	KE10H	Indust/Site Srvs Steelworkers	Line	ear	88.93	Hours
Faci	ors 100	Hours								
							0.88934	ISYS 061	4001 .88934200 - \$	System

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Starts In FY

0.88934 [SYS 061400] .88934200 - System

0.88934 [SYS 061400] .88934200 - System

266.80 Hours

88.93 Hours

WBS No: 1EEC05 Rockv Flats Closure Project Project Baseline Cost and Basis of Estimate Project Baseline Cost and Basis of Estimate Project WBS Filter Activity Filter Activity Filter Project Baseline Cost and Basis of Estimate Project WBS Filter Activity Filter Project Baseline Cost and Basis of Estimate Project Baseline Devi

	0002			Baseline Cost ar	nd Basis	of Estimate	Activity Filter	*	Starts In FY *
750	STRAIGHT 1	TIME BASE M020	MANAGE	RS (GRADE 69 - 72)	C104S	Closure Management		Linear	94.27 Hours
Factors	106	Hours							
	1				1	T		0.88934 [SYS 06140	01 .88934200 - Svstem
750	STRAIGHT 1	TIME BASE P090	INDUSTR	IAL HYGIENISTS	C104S	Closure Management		Linear	88.93 Hours
Factors	100	Hours							
	T		1						01 .88934200 - Svstem
750	STRAIGHT		IOTHER A	DMINISTRATIVE & PROFE	C242S	Transportation		Linear	88.93lHours
Factors	100	Hours						0.00004 [0)/0.00440	01 00004000 0 4
750	OTD A IOLIT I	TIME BASE S020	ENI//IDON	MENTAL COLENITION	04000	F			01 .88934200 - Svstem
750	STRAIGHT 1 100	Hours	IENVIRON	MENTAL SCIENTISTS	C103S	Environmental Compliance		Linear	88.93lHours
Factors	100	Hours						0.00034 [CVC 06140	01 .88934200 - Svstem
A5C	SUPPLIES	0000	NONE		C104S	Closure Management		0.00934 1313 00140	13.540.23 Dollars
Factors		Dollars	1.015	FY00 Escalation	01040	TOTOSUIC IVIAITAGOTTOTIC		Lincal	10.040.2010011413
	.0000	20						0.88934 [SYS 06140	01 .88934200 - System
A5H	SUBCONTR	ACTED SRVS E130	OTHER E	NGINEERS	C105S	Work Control Center		Linear	5.008.51 Dollars
Factors	5506	Prime Dollars	1.02283	FY00 Escalation					
								0.88934 [SYS 06140	01 .88934200 - Svstem
A5H	SUBCONTR	ACTED SRVS S010	CHEMIST	S	C103S	Environmental Compliance		Linear	9.096.46 Dollars
Factors	10000	Dollars	1.02283	FY00 Escalation					
					ı			0.88934 [SYS 06140	01 .88934200 - Svstem
A5H		ACTED SRVS S010			C103S	Environmental Compliance		Linear	9,096.46 Dollars
Factors	10000	Dollars	1.02283	FY00 Escalation					
	T		I			1			0] .88934200 - System
A5H		ACTED SRVS T050			KE10H	Indust/Site Srvs Steelworkers		Linear	2,910.87 Dollars
Factors	100	Hours	32	Dollars/Hr.		1.02283 FY00 Escalation		0.00004 [0\/0.00440	01 00004000 0
								0.88934 JSYS 06140	0] .88934200 - System

Line Item 865BESAPEN-1EMC01912 - Planning & Engineering

BOE

Estimators Experience - Estimate is based on Hazards Reduction/Stabilization template prepared by the Kaiser-Hill PCI organization. Experience Item Desc - Planning & Engineering Beryllium Shop

Breakdown of Cost Data:

Item - Planning & Engineering Beryllium Shop

Units - 1)Dollars

Unit Cost - 1)1,410

Unit Cost Adjustment factor - None Revised Unit Cost - None

Revised Unit Cost - None Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es	Cost Element		Skill	Department	Curve	Quantity Units
	A5R	MISC EXPENSES	0000 NONE	C104S Closure Management	Linear	1.272.78 Dollars
		•	•	•		

0.88934 [SYS 061400] .88934200 - System

Factors 0.47 Dollars per Square Foot 3000 Square Feet 1.015 -- FY00 Escalation --

Line Item 865BESBCHR-1EMC01912 - Characterization

BOE

Estimators Experience - Estimate is based on Hazards Reduction/Stabilization template prepared by the Kaiser-Hill PCI organization.

Experience Item Desc - Characterization of Beryllium Shop

Breakdown of Cost Data:

Item - Characterization of Beryllium Shop

Units - 1)Dollars

Unit Cost - 1)4,980

Unit Cost Adjustment factor - None

Revised Unit Cost - None Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

 Resources
 Cost Element
 Skill
 Department
 Curve
 Quantity
 Units

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Proiect Baseline Devl **Rocky Flats Closure Project** WBS Filter 1EEC **Baseline Cost and Basis of Estimate**

Activity Filter Starts In FY A5R MISC EXPENSES 0000 NONE C104S Closure Management 4.495.36 Dollars Linear

Factors 1.66 Dollars per Square Foot 3000 Square Feet 1.015 -- FY00 Escalation --

Line Item 865BESCSPR-1EMC01912 - Site Preparation

0.88934 [SYS 061400] .88934200 - System

BOE

1EEC05

1EEC5002

WBS No:

Activity ID:

BOE

BOE

BOE

Estimators Experience - Estimate is based on Hazards Reduction/Stabilization template prepared by the Kaiser-Hill PCI organization. Experience Item Desc - Site Preparation of Beryllium Shop

Breakdown of Cost Data:

Item - Site Preparation of Beryllium Shop

Units - 1)Dollars Unit Cost - 1)3,000

Unit Cost Adjustment factor - None

Revised Unit Cost - None Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources Cost Element Units A5R MISC EXPENSES 0000 NONE C104S Closure Management Linear 947.82 Dollars

0.35 3000 Square Feet Factors Dollars per Square Foot 1.015 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - System

Line Item 865BESDPYA-1EMC01912 - Physical Activities

Estimators Experience - Estimate is based on Hazards Reduction/Stabilization template prepared by the Kaiser-Hill PCI organization.

Experience Item Desc - Physical Activities for Beryllium Shop

Breakdown of Cost Data:

Item - Physical Activities for Beryllium Shop

Units - 1)Dollars

Unit Cost - 1)19,950

Unit Cost Adjustment factor - None

Revised Unit Cost - None Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Units Resources Cost Element Skill Department Curve Quantity A5R MISC EXPENSES 0000 NONE 18.008.51 Dollars C104S Closure Management Linear

Factors 6.65 Dollars per Square Foot 3000 Square Feet 1.015 -- FY00 Escalation --

Line Item 865BESEPMG-1EMC01912 - Project Management

Estimators Experience - Estimate is based on Hazards Reduction/Stabilization template prepared by the Kaiser-Hill PCI organization.

Experience Item Desc - Project Management for Beryllium Shop

Breakdown of Cost Data:

Item - Project Management for Beryllium Shop

Units - 1)Dollars

Unit Cost - 1)4,260

Unit Cost Adjustment factor - None

Revised Unit Cost - None

Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources Cost Element Skill Department Curve **Ouantity** Units A5R MISC EXPENSES 0000 NONE C104S Closure Management Linear 3.845.43 Dollars

1.42 Dollars per Square Foot 3000 Square Feet 1.015 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - System

0.88934 [SYS 061400] .88934200 - System

Line Item 865HIBAPEN-1EMC01913 - Planning & Engineering

Estimators Experience - Estimate is based on Hazards Reduction/Stabilization template prepared by the Kaiser-Hill PCI organization.

Experience Item Desc - Planning & Engineering Contaminated Area

Breakdown of Cost Data:

Item - Planning & Engineering Contaminated Area

Units - 1)Dollars

Rocky Flats Closure Project Baseline Cost and Basis of Estimate Proiect WBS Filter Activity Filter Baseline Devl 1EEC

Starts In FY

Unit Cost - 1)20,350 Unit Cost Adjustment factor - None Revised Unit Cost - None Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resource

BOE

ces		Cost Element		Skill	Department	Curve	Quantity	Units
	A5R	MISC EXPENSES	0000	NONE C104S	Closure Management	Linear	18.369.58	Dollars

0.55 Dollars per Square 37000 Square Feet 1.015 -- FY00 Escalation --Factors

Line Item 865HIBBCHR-1EMC01913 - Characterization

0.88934 [SYS 061400] .88934200 - System

0.88934 [SYS 061400] .88934200 - System

Experience Item Desc - Characterization Contaminated Area

Breakdown of Cost Data: Item - Characterization Contaminated Area Units - 1)Dollars

Unit Cost - 1)69,930 Unit Cost Adjustment factor - None

Revised Unit Cost - None Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resource

BOE

rces	Cost Element	Skill	Department	Curve	Ouantity	Units
	A5R MISC EXPENSES	0000 NONE	C104S Closure Management	Linear	63.124.56	Dollars

1.89 Dollars per Square Foot Square Feet 1.015 -- FY00 Escalation --Factors

Line Item 865HIBCSPR-1EMC01913 - Site Preparation

Estimators Experience - Estimate is based on Hazards Reduction/Stabilization template prepared by the Kaiser-Hill PCI organization.

Estimators Experience - Estimate is based on Hazards Reduction/Stabilization template prepared by the Kaiser-Hill PCI organization.

Experience Item Desc - Site Preparation Contaminated Area

Breakdown of Cost Data:

Item - Site Preparation Contaminaed Area

Units - 1)Dollars

Unit Cost - 1)14,800

Unit Cost Adjustment factor - None

Revised Unit Cost - None

Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resource

ces		Cost Element		Skill		Department	Curve	Quantity	Units
	A5R	MISC EXPENSES	0000	NONE	C104S	Closure Management	Linear	13.359.70	Dollars

0.4 Dollars per Square Foot 37000 Square Feet 1.015 -- FY00 Escalation --Factors

Line Item 865HIBDPYA-1EMC01913 - Physical Activities

0.88934 [SYS 061400] .88934200 - System

BOE

Estimators Experience - Estimate is based on Hazards Reduction/Stabilization template prepared by the Kaiser-Hill PCI organization.

Experience Item Desc - Physical Activities for Contaminated Area

Breakdown of Cost Data:

Item - Physical Activities for the Contamination Area

Units - 1)Dollars

Unit Cost - 1)280,460

Unit Cost Adjustment factor - None

Revised Unit Cost - None

Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Units Resources Cost Element Skill Department

Proiect Baseline Devl **Rocky Flats Closure Project** WBS Filter 1EEC **Baseline Cost and Basis of Estimate**

Activity Filter Starts In FY A5R MISC EXPENSES 0000 NONE C104S Closure Management 253.166.20 Dollars Linear

Factors 7.58 Dollars per Square Foot 37000 Square Feet 1.015 -- FY00 Escalation --

Line Item 865HIBEPMG-1EMC01913 - Project Management

Estimators Experience - Estimate is based on Hazards Reduction/Stabilization template prepared by the Kaiser-Hill PCI organization. BOE

Experience Item Desc - Project Management for Contaminated Area

Breakdown of Cost Data:

Item - Project Management for Contaminated Area

Units - 1)Dollars

1EEC05

1EEC5002

WBS No:

Activity ID:

BOE

BOE

Unit Cost - 1)59,940

Unit Cost Adjustment factor - None

Revised Unit Cost - None Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources Cost Element Units A5R MISC EXPENSES 0000 NONE C104S Closure Management Linear 54.106.77 Dollars

1.62 Dollars per Square Foot 37000 Square Feet 1.015 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - System

0.88934 [SYS 061400] .88934200 - System

0.88934 [SYS 061400] .88934200 - System

Line Item 865HIBFSUS-1EMC01913 - Support Services BOE

Estimators Experience - Estimate is based on Hazards Reduction/Stabilization template prepared by the Kaiser-Hill PCI organization.

Experience Item Desc - Support Services Contaminated Area

Breakdown of Cost Data:

Item - Support Services Contaminated Area

Units - 1)Dollars

Unit Cost - 1)55,130

Unit Cost Adjustment factor - None Revised Unit Cost - None

Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Units Resources Cost Element Department Curve A5R MISC EXPENSES 0000 NONE 49.764.87 Dollars C104S Closure Management Linear

Factors 1.49 Dollars per Square Foot 37000 Square Feet 1.015 -- FY00 Escalation --

Line Item 865METAPEN-1EMC01912 - Planning & Engineering

Estimators Experience - Estimate is based on Hazards Reduction/Stabilization template prepared by the Kaiser-Hill PCI organization.

Experience Item Desc - Planning & Engineering Metrology Labs

Breakdown of Cost Data:

Item - Planning & Engineering Metrology Labs

Units - 1)Dollars

Unit Cost - 1)450

Unit Cost Adjustment factor - None

Revised Unit Cost - None Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources Cost Element Skill Department Curve **Ouantity** Units A5R MISC EXPENSES 0000 NONE C104S Closure Management Linear 406.21 Dollars

Factors 0.45 Dollars per Square Foot 1000 Square Feet 1.015 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - System

Line Item 865METBCHR-1EMC01912 - Characterization

Estimators Experience - Estimate is based on Hazards Reduction/Stabilization template prepared by the Kaiser-Hill PCI organization.

Experience Item Desc - Characterization Metrology Labs

Breakdown of Cost Data:

Item - Characterization of Metrology Labs

Units - 1)Dollars

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Activity Filter Baseline Devl 1EEC

Starts In FY

Unit Cost - 1)1,570 Unit Cost Adjustment factor - None Revised Unit Cost - None Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resource

BOE

ces		Cost Element		Skill	Department	Curve	Quantity	Units
	A5R	MISC EXPENSES	0000	NONE C104S	Closure Management	Linear	1.417.21	Dollars

1.57 Dollars per Square Foot 1000 Square Feet 1.015 -- FY00 Escalation --Factors

Line Item 865METCSPR-1EMC01912 - Site Preparation

0.88934 [SYS 061400] .88934200 - System

0.88934 [SYS 061400] .88934200 - System

Estimators Experience - Estimate is based on Hazards Reduction/Stabilization template prepared by the Kaiser-Hill PCI organization. Experience Item Desc - Site Preparation of Metrology Labs

Breakdown of Cost Data:

Item - Site Preparation of Metrology Labs

Units - 1)Dollars Unit Cost - 1)330

Unit Cost Adjustment factor - None

Revised Unit Cost - None Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resource

BOE

rces	Cost Element	Skill	Department	Curve	Ouantity	Units
	A5R MISC EXPENSES	0000 NONE	C104S Closure Management	Linear	297.89	Dollars

0.33 Dollars per Square Foot Square Feet 1.015 -- FY00 Escalation --

Line Item 865METDPYA-1EMC01912 - Physical Activities

Estimators Experience - Estimate is based on Hazards Reduction/Stabilization template prepared by the Kaiser-Hill PCI organization.

Experience Item Desc - Physical Activities of Metrology Lab

Breakdown of Cost Data:

Item - Physical Activities of Metrology Lab

Units - 1)Dollars

Unit Cost - 1)6,290

Unit Cost Adjustment factor - None

Revised Unit Cost - None

Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resourc

rces	S Cost Element		Skill		Department		Curve	Quantity	Units
	A5R	MISC EXPENSES	0000	NONE	C104S	Closure Management	Linear	5.677.87	Dollars

Dollars per Square Foot 1000 Square Feet 1.015 -- FY00 Escalation --6.29 Factors

Line Item 865METEPMG-1EMC01912 - Project Management

0.88934 [SYS 061400] .88934200 - System

BOE

Estimators Experience - Estimate is based on Hazards Reduction/Stabilization template prepared by the Kaiser-Hill PCI organization.

Experience Item Desc - Project Management for Metrology Lab

Breakdown of Cost Data:

Item - Project Management for Metrology Lab

Units - 1)Dollars

Unit Cost - 1)1,350

Unit Cost Adjustment factor - None

Revised Unit Cost - None

Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Units Resources Skill Cost Element Department Curve

Proiect Baseline Devl **Rocky Flats Closure Project** WBS Filter 1EEC **Baseline Cost and Basis of Estimate**

Activity Filter Starts In FY A5R MISC EXPENSES 0000 NONE C104S Closure Management 1.218.62 Dollars Linear

Factors 1.35 Dollars per Square Foot 1000 Square Feet 1.015 -- FY00 Escalation --

Line Item 865METFSUS-1EMC01912 - Support Services

1EEC05

1EEC5002

WBS No:

Activity ID:

BOE

BOE

BOE

0.88934 [SYS 061400] .88934200 - System

Estimators Experience - Estimate is based on Hazards Reduction/Stabilization template prepared by the Kaiser-Hill PCI organization. BOE

Experience Item Desc - Support Services for Metrology Lab

Breakdown of Cost Data:

Item - Support Services for Metrology Lab

Units - 1)Dollars

Unit Cost - 1)1,240

Unit Cost Adjustment factor - None

Revised Unit Cost - None Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources Cost Element Units MISC EXPENSES 0000 NONE C104S Closure Management Linear 1.119.33 Dollars

Square Feet Factors 1.24 Dollars per Square Foot 1000 1.015 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - System

0.88934 [SYS 061400] .88934200 - System

Line Item 865PropLI-1EMC017040 - B.865 Light Industrial Area

Historical Data Source - Cost Estimate Derived From "Disposal Cost Model for Type I and Type II Buildings Template."

Item Desc - Property Removal Costs from Type II Light Industrial Areas

Breakdown of Historical Data: Item - Property Removal Costs

Units - 1)Dollars

Unit Cost - 1)772,900

Unit Cost Adjustment factor - None

Revised Unit Cost - None Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Factors 7729 Items

Units Resources Cost Element Department Curve Quantity A5C SUPPLIES 0000 NONE 697.683.00 Dollars C104S Closure Management Linear

100 Dollars per Item (Average) 1.015 -- FY00 Escalation --

Line Item 865PropT2B-1EMC01704 - B.865 Type II w/Both

Historical Data Source - Cost Estimate Derived From "Disposal Cost Model for Type I and Type II Buildings Template."

Item Desc - Property Disposition Costs for Type II Industrial Areas with Heavy Machinery and Tanks

Breakdown of Historical Data: Item - Property Disposition

Units - 1)Dollars

Unit Cost - 1)830,975

Unit Cost Adjustment factor - None

Revised Unit Cost - None Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources Cost Element Skill Department Curve **Ouantity** Units A5C SUPPLIES 0000 NONE C104S Closure Management Linear 750.106.30 Dollars

Factors 3865 Items 215 Dollars per Item 1.015 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - System

Line Item 865PropT2H-1EMC01704 - B.865 Type II w/Heavy Machinery

Historical Data Source - Cost Estimate Derived From "Disposal Cost Model for Type I and Type II Buildings Template."

Item Desc - Property Removal costs from Type II Industrial Areas with Heavy Machinery

Breakdown of Historical Data: Item - Property Removal

Units - 1)Dollars

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Activity Filter Baseline Devl

Filter 1EEC

Starts In FY

Unit Cost - 1)599,075 Unit Cost Adjustment factor - None Revised Unit Cost - None Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

ces		Cost Element		Skill		Department	Curve	<i>Ouantity</i>	Units
	A5C	SUPPLIES	0000	NONE	C104S	Closure Management	Linear	540.774.30	Dollars

Factors 3865 Items 155 Dollars per Item 1.015 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - System

BOE

Historical Data Source - Cost Estimate Derived From "Disposal Cost Model for Type I and Type II Buildings Template." Item Desc - Property Remvoal costs from Type II Industrial Areas with Tanks Breakdown of Historical Data:

Item - Property Disposition costs
Units - 1)Dollars
Unit Cost - 1)695,700

Unit Cost Adjustment factor - None Revised Unit Cost - None

Basis for adjustment - N/A

Line Item 865PropT2T-1EMC01704 - B.865 Type II w/Tanks

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

rces		Co	ost Element			Skill			Department	Curve	Ouantity	Units
	A5C	SUPPLIES		0000	NONE		C104S	Closure	Management	Linear	627.995.90	Dollars
	Factors	3865	Items		180	Dollars per Item		1.015	FY00 Escalation			

Line Item 865YRDAPEN-1EMC01911 - Planning & Engineering

0.88934 [SYS 061400] .88934200 - System

0.88934 [SYS 061400] .88934200 - System

BOE

Estimators Experience - Estimate is based on Hazards Reduction/Stabilization template prepared by the Kaiser-Hill PCI organization. Experience Item Desc - Planning & Engineering Yard Areas

Breakdown of Cost Data:

Item - Planning & Engineering Yard Areas

Units - 1)Dollars

Unit Cost - 1)850,000

Unit Cost Adjustment factor - None

Revised Unit Cost - None

Basis for adjustment -N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resourc

BOE

rces	Cost Element		Skill			Department	Curve	Quantity	Units	ı
	A5R	MISC EXPENSES	0000	NONE	C104S	Closure Management	Linear	767.28	Dollars	l

Factors 0.17 Dollars per Square Foot

5000 Square Feet 1.015 -- FY00 Escalation --

Line Item 865YRDBCHR-1EMC01911 - Characterization

Estimators Experience - Estimate is based on Hazards Reduction/Stabilization template prepared by the Kaiser-Hill PCI organization.

Experience Item Desc - Characterization Yard Areas

Breakdown of Cost Data:

Item - Characterization of Yard Areas

Units - 1)Dollars

Unit Cost - 1)3,050

Unit Cost Adjustment factor - None

Revised Unit Cost - None

Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources Cost Element Skill Department Curve Quantity Units

Rocky Flats Closure Proiect Proiect Baseline Devl

Baseline Cost and Basis of Estimate

WBS Filter

Activity Filter

*

A5R MISC EXPENSES 0000 NONE C104S Closure Management

Factors 0.61 Dollars per Square Foot 5000 Square Feet 1.015 -- FY00 Escalation --

Line Item 865YRDCSPR-1EMC01911 - Site Preparation

1EEC05

1EEC5002

WBS No:

Activity ID:

BOE

BOE

BOE

BOE

Linear

Estimators Experience - Estimate is based on Hazards Reduction/Stabilization template prepared by the Kaiser-Hill PCI organization. Experience Item Desc - Site Preparation of Yard Areas

Breakdown of Cost Data:

Item - Site Preparation of Yard Areas

Units - 1)Dollars

Unit Cost - 1)650

Unit Cost Adjustment factor - None

Revised Unit Cost - None Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources Cost Element Skill Department Curve Quantity Units A5R MISC EXPENSES 0000 NONE C104S Closure Management Linear 586,74 Dollars

Factors 0.13 Dollars per Square Foot 5000 Square Feet 1.015 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - System

0.88934 [SYS 061400] .88934200 - System

Starts In FY

2.753.18 Dollars

Line Item 865YRDDPYA-1EMC01911 - Physical Activities

Estimators Experience - Estimate is based on Hazards Reduction/Stabilization template prepared by the Kaiser-Hill PCI organization.

Experience Item Desc - Physical Activities Yard Areas

Breakdown of Cost Data:

Item - Physical Activities Yard Areas

Units - 1)Dollars

Unit Cost - 1)12,250

Unit Cost Adjustment factor - None

Revised Unit Cost - None Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources Cost Element Skill Department Curve Quantity Units A5R MISC EXPENSES 0000 NONE C104S Closure Management Linear 11.057.86 Dollars

Factors 2.45 Dollars per Square Foot 5000 Square Feet 1.015 -- FY00 Escalation --

Line Item 865YRDEPMG-1EMC01911 - Project Management

0.88934 [SYS 061400] .88934200 - System

Estimators Experience - Estimate is based on Hazards Reduction/Stabilization template prepared by the Kaiser-Hill PCI organization.

Experience Item Desc - Project Management Yard Areas

Breakdown of Cost Data:

Item - Project Management Yard Areas

Units - 1)Dollars

Unit Cost - 1)2,600

Unit Cost Adjustment factor - None

Revised Unit Cost - None Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources Cost Element Skill Department Curve Quantity Units A5R MISC EXPENSES 0000 NONE C104S Closure Management Linear 2.346.97 Dollars

Factors 0.52 Dollars per Square Foot 5000 Square Feet 1.015 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - System

Line Item 865YRDFSUS-1EMC01911 - Support Services

Estimators Experience - Estimate is based on Hazards Reduction/Stabilization template prepared by the Kaiser-Hill PCI organization.

Experience Item Desc - Support Services Yard Areas

Breakdown of Cost Data:

Item - Support Services Yard Areas

Units - 1)Dollars

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1EEC

Activity Filter Starts In FY

Unit Cost - 1)2,400 Unit Cost Adjustment factor - None Revised Unit Cost - None Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resource

ces		Cost Element		Skill	Department	Curve	Ouantity	Units
	A5R	MISC EXPENSES	0000	NONE C104S	Closure Management	Linear	2.166.44	Dollars

0.48 Dollars per Square Foot 5000 Square Feet 1.015 -- FY00 Escalation --Factors

0.88934 [SYS 061400] .88934200 - System

Line Item 881HR001 - HR Project Execution Plan BOE

Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate.

Experience Item Desc - Project Execution Plan Initiation and Development

Breakdown of Cost Data: Item - PEP Development Units - 1) Hours 2) Dollars Unit Cost - 1)200 2)20,350 Unit Cost Adjustment factor - None Revised Unit Cost - N/A Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es		Cost Element	Skill	Department Property of the Control o	Curve	Quantity Units
	750	STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C103S Environmental Compliance	Linear	22.23 Hours
	Factors	25 Hours				

						0.88934 15 15 06 140	UI .889342UU - SVStem
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C104S	Closure Management	Linear	155.63 Hours
F	475						

Factors 175 Hours

		0.88934 15 t 5 06 14001 .88934200 - System
A5H SUBCONTRACTED SRVS	P160 TECHNICAL WRITERS AND EDITOR C104S Closure Management	Linear 13,189,86 Dollars

Factors 14500 Dollars 1.02283 -- FY00 Escalation --

					0.88934 [SYS 06140	01 .88934200 - Svstem
A5H SUBCONTRACTED SRVS	P160	TECHNICAL WRITERS AND EDITOR	C104S	Closure Management	Linear	5.321.43 Dollars

1.02283 -- FY00 Escalation --26 225 Dollars per Week Factors weeks

0.88934 [SYS 061400] .88934200 - System

Line Item 881HR002 - HR Work Procedures

BOE

Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate.

Experience Item Desc - HR Work Procedure Development

Breakdown of Cost Data: Item - Work Procedures Units - 1) Hours 2) Dollars Unit Cost - 1)280 2)7,000 Unit Cost Adjustment factor - None Revised Unit Cost - N/A Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es		(Cost Element	Skill		Department	Curve	Quantity Un	its
	750	STRAIGH	IT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C104S	Closure Management	Linear	57.81 Hour	s
	Factors	65	Hours						

WBS No: 1EEC05 Proiect Baseline Devl **Rocky Flats Closure Project** Activity ID: 1EEC5002 WBS Filter 1EEC **Baseline Cost and Basis of Estimate** Activity Filter

750 STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C104S	Closure Management	Linear	57.81 Hours
Factors 65 Hours						
					0.88934 [SYS 06140	01 .88934200 - System
750 STRAIGHT TIME BASE	P070	COST ESTIMATORS PLANNERS AN	C104S	Closure Management	Linear	133.40 Hours
Factors 150 Hours						
					0.00034 [CVC.06140	01 00024200 System

0.88934 SYS 0614001.88934200 - System 0000 NONE A5H SUBCONTRACTED SRVS C104S Closure Management Linear

26 Weeks 225 1.02283 -- FY00 Escalation --Factors Dollars per Week

0.88934 [SYS 061400] .88934200 - System

0.88934 [SYS 061400] .88934200 - System

BOE

Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate.

Experience Item Desc - Develolp Health, Safety, Emergency Plans

Breakdown of Cost Data:

Line Item 881HR005 - Develop Health/Safety/Emer. Plan

Item - Develop Health, Safety, Emergency Plans

Units - 1) Hours 2) Dollars Unit Cost - 1)650 2)5,500

Unit Cost Adjustment factor - None

Revised Unit Cost - N/A

Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department	Curve	Quantity Units
STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C104S	Closure Management	Linear	62.25 Hours
70 Hours						
					0.88934 [SYS 061400	0] .88934200 - System
STRAIGHT TIME BASE	P050	COMPLIANCE INSPECTORS	C104S	Closure Management	Linear	311.27 Hours
350 Hours						
					0.88934 [SYS 061400	0] .88934200 - System
STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	C104S	Closure Management	Linear	88.93 Hours
100 Hours						
					0.88934 [SYS 061400	01 .88934200 - Svstem
STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C104S	Closure Management	Linear	88.93 Hours
	STRAIGHT TIME BASE 70 Hours STRAIGHT TIME BASE 350 Hours STRAIGHT TIME BASE 100 Hours	STRAIGHT TIME BASE M020 70 Hours STRAIGHT TIME BASE P050 350 Hours STRAIGHT TIME BASE P080 100 Hours	STRAIGHT TIME BASE 70 Hours STRAIGHT TIME BASE 350 Hours STRAIGHT TIME BASE 100 HOURS MANAGERS (GRADE 69 - 72) COMPLIANCE INSPECTORS HEALTH PHYSICISTS 100 Hours	STRAIGHT TIME BASE M020 MANAGERS (GRADE 69 - 72) C104S 70 Hours STRAIGHT TIME BASE P050 COMPLIANCE INSPECTORS C104S 350 Hours STRAIGHT TIME BASE P080 HEALTH PHYSICISTS C104S 100 Hours	TO Hours STRAIGHT TIME BASE P050 COMPLIANCE INSPECTORS C104S Closure Management 350 Hours STRAIGHT TIME BASE P080 HEALTH PHYSICISTS C104S Closure Management 100 Hours	STRAIGHT TIME BASE

100 Line Item 881HR006 - Collect & Develop CDPH&E Data

Factors

BOE

Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate.

Experience Item Desc - Collection & Development of CDPH&E Data

Breakdown of Cost Data:

Item - Collection of Data for CDPH&E

Hours

Units - 1) Hours 2) Dollars Unit Cost - 1)489 2)3,222.22

Unit Cost Adjustment factor - None

Revised Unit Cost - N/A

Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es		Cost Element		Skill		Department	Curve	<i>Ouantity</i>	Units
	750	STRAIGHT TIME BASE	E120	SAFETY ENGINEERS	C104S	Closure Management	Linear	155.63	Hours
	т.	475							

WBS No: 1EEC05 Rockv Flats Closure Project Project Baseline Devl Activity ID: 1EEC5002 Baseline Cost and Basis of Estimate WBS Filter 1EEC

	O STRAIGHT TIME PASE MO20 MANACERS (CRARE SO, 72) C404S Closure Monograment							*	Starts In FY	*
750	STRAIGH	T TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C104S	Closure Management		Linear	133.40	Hours
Factors	150	Hours								

750 STRAIGHT TIME BASE P050 COMPLIANCE INSPECTORS C104S Closure Management Linear 145.85 Hours

Factors 164 Hours

A5H SUBCONTRACTED SRVS 0000 NONE C104S Closure Management Linear 2.931.08[Dollars

Factors 3222.22 Dollars 1.02283 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - System

Line Item 883OFFAPEN-1EMC01913 - Planning & Engineering

BOE Estimators Experience - Estimate is based on Hazards Reduction/Stabilization template prepared by the Kaiser-Hill PCI organization.

Experience Item Desc - Planning & Engineering Office Areas

Breakdown of Cost Data:

Item - Planning & Engineering Office Areas

Units - 1)Dollars Unit Cost - 1)3,300

Unit Cost Adjustment factor - None

Revised Unit Cost - None Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

BOE

es		Cost Element		Skill		Department	Curve	Ouantity	Units
	A5R	MISC EXPENSES	0000	NONE	C104S	Closure Management	Linear	2.978.85	Dollars

Factors 0.15 Dollars per Square Foot 22000 Square Feet 1.015 -- FY00 Escalation --

Line Item 8830FFBCHR-1EMC01913 - Characterization

Estimators Experience - Estimate is based on Hazards Reduction/Stabilization template prepared by the Kaiser-Hill PCI organization.

Experience Item Desc - Characterization of Office Areas

Breakdown of Cost Data:

Item - Characterization of Office Areas

Units - 1)Dollars

Unit Cost - 1)11,440

Unit Cost Adjustment factor - None

Revised Unit Cost - None Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

BOE

ces		Cost Element		Skill		Department	Curve	Quantity	Units
	A5R	MISC EXPENSES	0000	NONE	C104S	Closure Management	Linear	10.326.68	Dollars

Factors 0.52 Dollars per Square Foot 22000 Square Feet 1.015 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - System

0.88934 [SYS 061400] .88934200 - System

Line Item 883OFFCSPR-1EMC01913 - Site Preparation

Estimators Experience - Estimate is based on Hazards Reduction/Stabilization template prepared by the Kaiser-Hill PCI organization.

Experience Item Desc - Site Preparation of Office Areas

Breakdown of Cost Data:

Item - Site Preparation of Office Areas

Units - 1)Dollars

Unit Cost - 1)2,420

Unit Cost Adjustment factor - None Revised Unit Cost - None

Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s		Cost Element		Skill		Department	Curve	Quantity	Units
	A5R	MISC EXPENSES	0000	NONE	C104S	Closure Management	Linear	2,184.49	Dollars

Factors 0.11 Dollars per Square Foot 22000 Square Feet 1.015 -- FY00 Escalation --

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect E
WBS Filter 1
Activity Filter *

Baseline Devl 1EEC

ity Filter * Starts In FY *

Line Item 8830FFDPYA-1EMC01913 - Physical Activities

BOE

Estimators Experience - Estimate is based on Hazards Reduction/Stabilization template prepared by the Kaiser-Hill PCI organization. Experience Item Desc - Physical Activities for Office Areas

Breakdown of Cost Data:

Item - Physical Activities of Office Areas

Units - 1)Dollars Unit Cost - 1)45,980

Unit Cost - 1)45,980

Unit Cost Adjustment factor - None Revised Unit Cost - None

Revised Unit Cost - None Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es	Cost Element		Skill		Department	Curve	Ouantity	Units
A5R	MISC EXPENSES	0000	NONE	C104S	Closure Management	Linear	41.505.32	Dollars

Factors 2.09 Dollars per Square Foot 22000 Square Feet 1.015 -- FY00 Escalation --

Line Item 8830FFEPMG-1EMC01913 - Project Management

0.88934 [SYS 061400] .88934200 - System

BOE

Estimators Experience - Estimate is based on Hazards Reduction/Stabilization template prepared by the Kaiser-Hill PCI organization.

Experience Item Desc - Project Management for Office Areas

Breakdown of Cost Data:

Item - Project Management for Office Areas

Units - 1)Dollars Unit Cost - 1)9,900

Unit Cost - 1/9,900

Unit Cost Adjustment factor - None

Revised Unit Cost - None Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

rces		Cost Element		Skill		Department	Curve	Quantity	Units
	A5R	MISC EXPENSES	0000	NONE	C104S	Closure Management	Linear	8.936.55	Dollars

Factors 0.45 Dollars per Square Foot 22000 Square Feet

1.015 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - System

Estimators Experience - Estimate is based on Hazards Reduction/Stabilization template prepared by the Kaiser-Hill PCI organization.

Experience Item Desc - Support Services for Office Areas

Breakdown of Cost Data:

Item - Support Service for Office Areas

Units - 1)Dollars

Unit Cost - 1)9,020 Unit Cost Adjustment factor - None

Revised Unit Cost - None

Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es	Cost Element Skill		Skill	Department		Cur	ve	Ouantity	Units	ĺ	
	A5R	MISC EXPENSES	0000	NONE	C104S	Closure Management	Line	ear	8.142.19	Dollars	J

Factors 0.41 Dollars per Square Foot

22000 Square Feet 1.015 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - System

Line Item 883PLEAPEN-1EMC01914 - Planning & Engineering

BOE

Estimators Experience - Estimate is based on Hazards Reduction/Stabilization template prepared by the Kaiser-Hill PCI organization.

Experience Item Desc - Planning & Engineering of Plenums

Breakdown of Cost Data:

Item - Planning & Engineering of Plenums

Units - 1)Dollars

Unit Cost - 1)940

Unit Cost Adjustment factor - None

Revised Unit Cost - None

Basis for adjustment - N/A

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WBS No: 1EEC05 **Rocky Flats Closure Project** Activity ID: 1EEC5002 **Baseline Cost and Basis of Estimate** Proiect WBS Filter

Baseline Devl 1EEC

Starts In FY

0.88934 [SYS 061400] .88934200 - System

0.88934 [SYS 061400] .88934200 - System

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

BOE

Units Cost Element Department Curve Ouantity A5R MISC EXPENSES 0000 NONE C104S Closure Management Linear 848.52 Dollars

1.015 -- FY00 Escalation --0.47 Dollars per Square Foot 2000 Square Feet Factors

Line Item 883PLEBCHR-1EMC01914 - Characterization

Estimators Experience - Estimate is based on Hazards Reduction/Stabilization template prepared by the Kaiser-Hill PCI organization. Experience Item Desc - Characterization of Plenums

Breakdown of Cost Data:

Item - Characterization of Plenums

Units - 1)Dollars

Unit Cost - 1)3,320

Unit Cost Adjustment factor - None

Revised Unit Cost - None

Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

BOE

Units MISC EXPENSES 0000 NONE C104S Closure Management 2.996.90 Dollars Linear

-- FY00 Escalation --Factors 1.66 Dollars per Square Foot 2000 Square Feet 1.015

Line Item 883PLECSPR-1EMC01914 - Site Preparation

Estimators Experience - Estimate is based on Hazards Reduction/Stabilization template prepared by the Kaiser-Hill PCI organization.

Experience Item Desc - Site Preparation of Plenums

Breakdown of Cost Data:

Item - Site Preparation of Plenums

Units - 1)Dollars

Unit Cost - 1)700

Unit Cost Adjustment factor - None

Revised Unit Cost - None

Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resour

urces		Cost Element		Skill		Department	Curve	Ouantity	Units
	A5R	MISC EXPENSES	0000	NONE	C104S	Closure Management	Linear	631.88	Dollars

0.35 Dollars per Square Foot Square Feet -- FY00 Escalation --Factors 2000 1.015

0.88934 [SYS 061400] .88934200 - System

Line Item 883PLEDPYA-1EMC01914 - Physical Activities

BOE

Estimators Experience - Estimate is based on Hazards Reduction/Stabilization template prepared by the Kaiser-Hill PCI organization.

Experience Item Desc - Physical Activities for Plenums

Breakdown of Cost Data:

Item - Physical Areas for Plenums

Units - 1)Dollars

Unit Cost - 1)13,300

Unit Cost Adjustment factor - None

Revised Unit Cost - None

Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resourc

rces	Cost Element	Skill	Department	Curve	Quantity Units
	A5R MISC EXPENSES	0000 NONE	C104S Closure Management	Linear	12,005.67 Dollars

6.65 Dollars per Square Foot 2000 Square Feet 1.015 -- FY00 Escalation --Factors

0.88934 [SYS 061400] .88934200 - System

Line Item 883PLEEPMG-1EMC01914 - Project Management

Estimators Experience - Estimate is based on Hazards Reduction/Stabilization template prepared by the Kaiser-Hill PCI organization. BOE Experience Item Desc - Project Management for Plenums

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filter

Baseline Devl 1EEC

Starts In FY

Breakdown of Cost Data:

Item - Project Management for Plenums

Units - 1)Dollars

Unit Cost - 1)2,840

Unit Cost Adjustment factor - None

Revised Unit Cost - None Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Square Feet

Resource

BOE

ces		Cost Element	Skill		Department	Curve	Quantity	Units
	A5R	MISC EXPENSES	NONE	C104S	Closure Management	Linear	2.563.62	Dollars

Factors 1.42 Dollars per Square Foot

1.015 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - System

Line Item 883PLEFSUS-1EMC01914 - Support Services

Estimators Experience - Estimate is based on Hazards Reduction/Stabilization template prepared by the Kaiser-Hill PCI organization.

Experience Item Desc - Support Services for Plenums

Breakdown of Cost Data:

Item - Support Services for Plenums

Units - 1)Dollars

Unit Cost - 1)2,620

Unit Cost Adjustment factor - None

Revised Unit Cost - None Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

rces		Cost Element		Skill	Department	Curve	Quantity	Units
Į	A5R	MISC EXPENSES	0000	NONE	C104S Closure Management	Linear	2.365.03	Dollars

Factors 1.31

.31 Dollars per Square Foot

2000 Square Feet

2000

1.015 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - System

Line Item 9-1EMC230025 - Waste Repackaging-CA

BOE

Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate.

Experience Item Desc - Waste residing in the CA, left by former tenants, must be size reduced, packaged in crates and disposed.

Breakdown of Cost Data:

Item - Waste Repackaging in the CA
Units - 1)Hours 2)Dollars

Unit Cost - 1)2,400 2)41,400

Unit Cost Adjustment factor - None

Revised Unit Cost - N/A

Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es		Cost Element	Skill		Department	Curve	Ouantity	Units
	750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	177.87	Hours

Factors 200 Hours

750 STRAIGHT TIME BASE L060 MISSION SUP SPEC II (FLTTCH. WS KE10H Indust/Site Srvs Steelworkers Linear 533.61 Hours

Factors 600 Hours

						0.88934 ISYS 06140	01.88934200 - System
750	STRAIGHT TIME BASE	L060	MISSION SUP SPEC II (FLTTCH, WS	KE10H	Indust/Site Srvs Steelworkers	Linear	88.93 Hours
г.	400 11						

Factors 100 Hours

				0.88934 [SYS 06140	01 .88934200 - Svstem
750 STRAIGHT TIM	ME BASE L070	MISSION SUP SPEC III	KE10H Indust/Site Srvs Steelworkers	Linear	266.80 Hours
Factors 300 Ho	ours				

WBS No: 1EEC05
Activity ID: 1EEC5002

Rocky Flats Closure Project Project Baseline Devl
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EEC

			Daseille Cost all	iu Dasis	Activ	vity Filter *	Starts In FY *
750 STRAIGH	IT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C104S	Closure Management	Linear	94.27 Hours
Factors 106	Hours						
				1		0.88934 [SYS 06140	01 .88934200 - Svstem
750 STRAIGH	IT TIME BASE	P090	INDUSTRIAL HYGIENISTS	C104S	Closure Management	Linear	88.93 Hours
Factors 100	Hours						
						0.88934 [SYS 06140	01 .88934200 - Svstem
750 STRAIGH	IT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C242S	Transportation	Linear	88.93 Hours
Factors 100	Hours						
						0.88934 [SYS 06140	01 .88934200 - Svstem
750 STRAIGH	IT TIME BASE	S020	ENVIRONMENTAL SCIENTISTS	C103S	Environmental Compliance	Linear	355.74 Hours
Factors 400	Hours						
						0.88934 [SYS 06140	01 .88934200 - Svstem
A5C SUPPLIE	S	0000	NONE	C104S	Closure Management	Linear	31.593.88 Dollars
Factors 35000	Dollars		1.015 FY00 Escalation				
						0.88934 [SYS 06140	01 .88934200 - Svstem
A5H SUBCON	TRACTED SRVS	E130	OTHER ENGINEERS	C105S	Work Control Center	Linear	7.512.76 Dollars
Factors 8259	Prime Dollars		1.02283 FY00 Escalation				
						0.88934 [SYS 06140	01 .88934200 - Svstem
A5H SUBCON	TRACTED SRVS	T050	RADIATION CONTROL TECHNOLIGI	KE10H	Indust/Site Srvs Steelworkers	Linear	5.821.73 Dollars
Factors 200	Hours		32 Dollars/Hr.		1.02283 FY00 Escalation		
						0.88934 [SYS 06140	0] .88934200 - System

Line Item A0PDD01-1EMC019025 - Hazards Reduction Project Execution Plan

BOE

Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate.

Experience Item Desc - Develop and submit Hazards Reduction Project Execution Plan

Breakdown of Cost Data:

Item - Project Execution Plan
Units - 1)Dollars 2)Hours
Unit Cost - 1)15,180 2)187
Unit Cost Adjustment factor - None
Revised Unit Cost - N/A
Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es		Cost Element		Skill		<u>Department</u>	Curve	Quantity Units
	750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C104S	Closure Management	Linear	53.36 Hours
	Factors	60 Hours Planning phase part	icipation					
							0.88934 [SYS 06140	01 .88934200 - Svstem
	750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C104S	Closure Management	Linear	5.34 Hours
	Factors	6 Hours - Planning phase par	ticipation	1				
							0.88934 [SYS 06140	01 .88934200 - Svstem
	A5H	SUBCONTRACTED SRVS	0000	NONE	C104S	Closure Management	Linear	2.483.33 Dollars
	Factors	13 Weeks		210 Dollars/Week Subcontractor	r SME	1.02283 FY00 Escalation		

Factors 12450 Dollars SubC Planning support 1.02283 -- FY00 Escalation --

Line Item A0PDD02-1EMC019025 - MOU Development

BOE

Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate. Experience Item Desc - Develop and Agree On the Memorandum of Understanding Breakdown of Cost Data:

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Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filter

Baseline Devl 1EEC

Starts In FY

Item - Memorandum of Understanding
Units - 1)Dollars 2)Hours
Unit Cost - 1)832 2)188

Unit Cost Adjustment factor - None Revised Unit Cost - N/A

Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

WBS No:

Activity ID:

es	Cost Element	Skill	Department	Curve	Ouantity Units
75		M020 MANAGERS (GRADE 69 - 72)	C104S Closure Management	Linear	24.90 Hours
					<u> </u>

Factors 28 Hours

1EEC05

1EEC5002

						0.88934	ISYS 061400)I .88934200 - S	System
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C104S	Closure Management	Line	ear	24.90	Hours

Factors 28 Hours MOU participation

						0.88934 ISYS 06140	01.88934200 - System
750	STRAIGHT TIME BASE	P070	COST ESTIMATORS PLANNERS AN	C104S	Closure Management	Linear	24.90 Hours

Factors 28 Hours

			0.88934 [SYS 06140	01 .88934200 - Svstem
A5H SUBCONTRACTED SRVS	0000 NONE	C104S Closure Management	Linear	756.83 Dollars

Factors 832 Dollars 1.02283 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - System

Line Item A0PDD04-1EMC019025 - Data Collect Rqmts for Xition to D&D

BOE

Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate.

Experience Item Desc - Data Collection Requirement for Transition to D&D.

Breakdown of Cost Data:
Item - Data Collection
Units - 1)Dollars 2)Hours
Unit Cost - 1)327 2)28
Unit Cost Adjustment factor - None
Revised Unit Cost - N/A

Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es		Cost Element	Skill			Department	 Curve	Ouantity	U	Inits
	750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C103S	Environmental Compliance	 Linear	8.	89 Hou	ırs

Factors 10 hours

						0.88934 ISYS 06140	01.88934200 - System
A5H	SUBCONTRACTED SRVS	0000	NONE	C104S	Closure Management	Linear	297.45 Dollars

Factors 3 Weeks 109 Dollars/Week Subcontractor SME 1.02283 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - System

Line Item A0PDD05-1EMC019025 - Building Conditions Walkdowns BOE Estimators Experience - This estimate was

Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate.

Experience Item Desc - Periodic walkdowns throughout Hazards Reduction process.

Breakdown of Cost Data:

Item - Building Walkdowns
Units - 1)Dollars 2)Hours
Unit Cost - 1)11,456 2)884
Unit Cost Adjustment factor - None
Revised Unit Cost - N/A
Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

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WBS No: 1EEC05 Activity ID: 1EEC5002

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filter

Baseline Devl 1EEC

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R	250	urc	201

TLLO.	0002		Baseline Cost ar	nd Basis	of Estimate	Activity Filter	*	Starts In FY	*
s	Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers		Linear	92.49	Hours
Factors	104 Hours						0.00004 [0)/0.00440	01 0000 1000	0 1
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers		0.88934 [SYS 06140 Linear		Hours
Factors		L C020	ILLECTRICIANS	KL IVII	IIIIdusi/Site Sivs Steelworkers		Lilicai	32.43	il louis
			_				0.88934 [SYS 06140	01 .88934200 -	System
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers		Linear	92.49	Hours
Factors	104 hours								
==0		14040		01010			0.88934 [SYS 06140		
750 Factors	STRAIGHT TIME BASE 28 Hours	I M010	FOREMEN / TEAM LEADS / GROUP	C104S	Closure Management		Linear	24.90	Hours
raciors	26 Hours						0.88934 [SYS 06140	01 88934200 -	System
750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	C104S	Closure Management		Linear		1 Hours
Factors	74 hours								
	T		1	1	T		0.88934 [SYS 06140		
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C104S	Closure Management		Linear	8.00	Hours
Factors	9 Hours						0.88934 [SYS 06140	01 00004000	Cuatam
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C104S	Closure Management		U.00934 1313 06140		1 Hours
Factors	*	, mozo	THE TOTAL CONTROL OF THE	01010	I SIOSAIO IVIAITAASIIIOIII		LIIIOGI	02.01	II IOUIO
					1		0.88934 [SYS 06140	01 .88934200 -	Svstem
750	STRAIGHT TIME BASE	P090	INDUSTRIAL HYGIENISTS	C104S	Closure Management		Linear	92.49	Hours
Factors	104 hours								
750	STRAIGHT TIME BASE	5000	ENVIRONMENTAL SCIENTISTS	C104C	Closure Management		0.88934 [SYS 06140		System
750 Factors		5020	IENVIRONIVIENTAL SCIENTISTS	C1045	Closure Management		Linear	92.49	Inouis
1 actors	104 110413						0.88934 [SYS 06140	01 .88934200 -	System
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KE10H	Indust/Site Srvs Steelworkers		Linear		Hours
Factors	104 Hours								
		1	L		Table 1		0.88934 ISYS 06140		
A5H	SUBCONTRACTED SRVS		NONE SYSTEM STATE OF THE STATE	C104S	Closure Management		Linear	6.061.88	Dollars
Factors	6664 Dollars SubC SME suppor	τ	1.02283 FY00 Escalation				0.88934 [SYS 06140	01 88034300	Systom
A5H	SUBCONTRACTED SRVS	F130	OTHER ENGINEERS	C104S	Closure Management		0.00334 1313 00140 Linear		Dollars
Factors			1.02283 FY00 Escalation					101110	12011010
				1			0.88934 [SYS 06140		
A5H	SUBCONTRACTED SRVS	T050	RADIATION CONTROL TECHNOLIGI	KE10H	Indust/Site Srvs Steelworkers		Linear	4.359.31	Dollars
Factors	104 Hours		46.08 Dollars/Hr.		1.02283 FY00 Escalation -	-			•
							0.88934 ISYS 06140	UI .88934200 -	System

Line Item A0PDD06-1EMC019025 - Building Conditions Documentation

BOE

Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to 8.865 deem historical costs unreliable as a basis for estimate.

Breakdown of Cost Data:

Item - Building Conditions Documentation

Units - 1)Dollars 2)Hours Unit Cost - 1)484 2)5,762

Unit Cost Adjustment factor - None

Revised Unit Cost - N/A

Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

WBS No: 1EEC05 Activity ID: 1EEC5002

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filter

Baseline Devl 1EEC

ILLO	3002	Baseline Cost ar	nd Basis	of Estimate	ctivity Filter *		Starts In FY	*
es	Cost Element	Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H	Indust/Site Srvs Steelworkers		Linear	47.14	Hours
Factors	53 hours				0	88934 [SYS 0614	001 88034300	System
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KF10H	Indust/Site Srvs Steelworkers	0.	Linear		Hours
Factors		1 OVEN TELEVITATION TO		mady die divo dicomonicio	"			III IOUIO
					0.	88934 [SYS 0614	001.88934200 -	Svstem
750	STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers		Linear	47.14	Hours
Factors	53 hours							
	070 110117 7115 0105	Face Mula FAR (ORITION FURNIFIED	01010		0.	88934 [SYS 0614		
750	STRAIGHT TIME BASE	E080 NUCLEAR (CRITICALITY) ENGINEER	C104S	Closure Management		Linear	15.12	Hours
Factors	17 HOURS				0.	88934 [SYS 0614	.001 .88934200 -	System
750	STRAIGHT TIME BASE	M010 FOREMEN / TEAM LEADS / GROUP	C104S	Closure Management		Linear	15.12	Hours
Factors	17 hours							
					0.	88934 [SYS 0614		
750	STRAIGHT TIME BASE	M010 FOREMEN / TEAM LEADS / GROUP	C104S	Closure Management		Linear	47.14	Hours
Factors	53 hours							•
750	STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C104C	Closure Management	0.	88934 [SYS 0614		System
Factors		I MUZU IMANAGERS IGRADE 69 - 721	C1045	Closure Management		Linear	4.43	DIFIOUIS
1 actors	3 1100113				0	88934 [SYS 0614	.001 88934200 -	System
750	STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C104S	Closure Management		Linear		Hours
Factors	53 HOURS							
					0.	88934 [SYS 0614		
750	STRAIGHT TIME BASE	P090 INDUSTRIAL HYGIENISTS	C104S	Closure Management		Linear	47.14	Hours
Factors	53 hours							•
750	STRAIGHT TIME BASE	S020 ENVIRONMENTAL SCIENTISTS	C104C	Closure Management	0.	88934 [SYS 0614 Linear		System Hours
Factors		S020 ENVIRONMENTAL SCIENTISTS	C1045	Closure Management		Linear	56.70	JITOUIS
ruciors	100KS				0	88934 [SYS 0614	.001 88934200 -	System
750	STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KE10H	Indust/Site Srvs Steelworkers		Linear		Hours
Factors	53 hours							
					0.	88934 [SYS 0614		
A5H	SUBCONTRACTED SRVS	0000 NONE	C104S	Closure Management		Linear	3.020.02	Dollars
Factors	3320 Dollars	1.02283 FY00 Escalation						
٨٢٠٠	CLIDCONTD A CTED CDVC	TOTAL DADIATION CONTROL TECHNICION	I/E40!!	Indust/Oits Ones Otsshow !	0.	88934 [SYS 0614		
A5H		T050 RADIATION CONTROL TECHNOLIGI 46.08 Dollars/Hr.		1.02283 FY00 Escalation		Linear	2.221.57	IDollars
Factors	53 hours	40.00 Dullats/Fit.		1.02203 F100 Escalation	0	88934 [SYS 0614	.nn1 889342nn -	System
					0.	30304 1313 0014	- 0024200 -	OVOIGIII

Line Item A0PDD07-1EMC019025 - Reduced AB Request

BOE

Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate.

Experience Item Desc - Reduced Authorization Basis Request

Breakdown of Cost Data:

Item - Aurhorization Basis Reduction Request

Units - 1)Dollars 2)Hours Unit Cost - 1)1,328 2)195

Unit Cost Adjustment factor - None

Revised Unit Cost - N/A

Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

WBS No: 1EEC05 **Rocky Flats Closure Project** Activity ID: 1EEC5002 **Baseline Cost and Basis of Estimate**

Proiect Baseline Devl WBS Filter 1EEC Activity Filter

Resources

Cost Element Skill Department Curve Unit 750 STRAIGHT TIME BASE M020 MANAGERS (GRADE 69 - 72) C104S Closure Management Linear 4.45 Hours Factors **HOURS**

0.88934 [SYS 061400] .88934200 - System 750 STRAIGHT TIME BASE M020 MANAGERS (GRADE 69 - 72) C104S Closure Management Linear 4.45 Hours HOURS

Factors 5

0.88934 [SYS 061400] .88934200 - System A5H SUBCONTRACTED SRVS 0000 NONE C104S Closure Management 1.208.01 Dollars Linear

Factors 1328 Dollars SubC Administrative Support 1.02283 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - System C104S Closure Management A5H SUBCONTRACTED SRVS E110 QUALITY CONTROL ENGINEERS Linear 4.843.45 Dollars

Factors 5324.55 Prime Dollars 1.02283 -- FY00 Escalation --

Line Item A0PDD08-1EMC019025 - Hazards Reduction Work Procedures

BOE

Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate.

Experience Item Desc - Work Procedures for Hazards Reduction

Breakdown of Cost Data:

Item - Hazards Reduction Work Procedures

Units - 1)Dollars 2)Hours Unit Cost - 1)4,480 2)140

Unit Cost Adjustment factor - None

Revised Unit Cost - N/A

Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s	Cost Elemen	t	Skill		Department	Curve	Quantity	Units
75	STRAIGHT TIME BA	ASE M020	MANAGERS (GRADE 69 - 72)	C104S	Closure Management	Linear	7.11	Hours
Facto	rs 8 hours							
						0.88934 [SYS 061400	0] .88934200 - §	System
75	STRAIGHT TIME BA	ASE M020	MANAGERS (GRADE 69 - 72)	C104S	Closure Management	Linear	7.11	Hours
Facto	rs 8 hours							
						0.88934 [SYS 06140]	01 .88934200 - \$	System
75	STRAIGHT TIME BA	ASE P160	TECHNICAL WRITERS AND EDITOR	C104S	Closure Management	Linear	85.38	Hours
Facto	rs 96 hours							
						0.88934 [SYS 06140]	01 .88934200 - \$	System
A5	SUBCONTRACTED	SRVS 0000	NONE	C104S	Closure Management	Linear	4.075.21	Dollars

Factors 4480 Dollars 1.02283 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - System

0.88934 [SYS 061400] .88934200 - System

Starts In FY

BOE

Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate.

Experience Item Desc - Hazards Reduction Work Packages

Breakdown of Cost Data:

Item - Work Packages

Units - 1)Dollars 2)Hours Unit Cost - 1)17,732 2)368

Unit Cost Adjustment factor - None

Line Item A0PDD09-1EMC019025 - Hazards Reduction Work Packages

Revised Unit Cost - N/A

Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Cost Element Skill Curve Quantity Units Resources Department 6/23/00 10:41:52 AM Page 76 of 114 OFFICIAL USE ONLY WBS No: 1EEC05
Activity ID: 1EEC5002

Rocky Flats Closure Project Project Baseline Devl
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EEC

			Daseille Cost all	u Dasis	Activity Filter	. *	Starts In FY *
750	STRAIGHT TIME BASE	E040	ELECTRICAL ENGINEERS	C104S	Closure Management	Linear	113.84 Hours
Factors	128 hours						
		,			T	0.88934 [SYS 06140	01 .88934200 - Svstem
750	STRAIGHT TIME BASE	E070	MECHANICAL ENGINEERS	C104S	Closure Management	Linear	113.84 Hours
Factors	128 hours						
		1	T			0.88934 [SYS 06140	01 .88934200 - Svstem
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C103S	Environmental Compliance	Linear	8.00 Hours
Factors	9 Hours						
		1	T			0.88934 [SYS 06140	01 .88934200 - Svstem
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C103S	Environmental Compliance	Linear	9.78 Hours
Factors	11 hours						
		1	T			0.88934 [SYS 06140	01 .88934200 - Svstem
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C104S	Closure Management	Linear	17.79 Hours
Factors	20 Hours						
		1	T			0.88934 [SYS 06140	01 .88934200 - Svstem
A5H	SUBCONTRACTED SRVS	0000	NONE	C104S	Closure Management	Linear	5.821.73 Dollars
Factors	6400 Dollars Subcontract SME s	upport	1.02283 FY00 Escalation				
		ı				0.88934 [SYS 06140	01 .88934200 - Svstem
A5H	SUBCONTRACTED SRVS	P070	COST ESTIMATORS PLANNERS AN	C104S	Closure Management	Linear	10.308.05 Dollars
Factors	11331.9 dollars		1.02283 FY00 Escalation				

Line Item A0PDD10-1EMC019025 - P/R/E Prev & Corr Mtce Rqmts

BOE

Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate.

Experience Item Desc - Pre-Release Evaluation & Corrective Maintenance Requirements

Breakdown of Cost Data:

Item - PRE and Corrective Maintenance Requirements
Units - 1)Dollars 2)Hours

Unit Cost - 1)3,800 2)312

Unit Cost Adjustment factor - None

Revised Unit Cost - N/A

Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s			Cost Element		Skill		Department	Curve	Ouantity	Units
	750	STRAIGH	HT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C104S	Closure Management	Linear	27.57	Hours
F	Factors .	31	hours							
_								0.88934 [SYS 06140	01 .88934200 - \$	Svstem
	750	STRAIGH	HT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C104S	Closure Management	Linear	49.80	Hours
F	Factors .	56	hours							
_								0.88934 ISYS 06140	01 .88934200 - \$	System
	750	STRAIGH	HT TIME BASE	P070	COST ESTIMATORS PLANNERS AN	C103S	Environmental Compliance	Linear	56.92	Hours
I	Factors	64	hours							
_								0.88934 [SYS 06140	01 .88934200 - \$	System
	A5H	SUBCON	ITRACTED SRVS	0000	NONE	C104S	Closure Management	Linear	3.456.65	Dollars

Factors 3800 Dollars - SubC Technical & Admin 1.02283 -- FY00 Escalation --

Line Item A0PDD11-1EMC019025 - Room Turnover Checklists

Breakdown of Cost Data:

BOE

Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate.

Experience Item Desc - Room Turnover Checklists

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0.88934 [SYS 061400] .88934200 - System

 WBS No:
 1EEC05
 Roc

 Activity ID:
 1EEC5002
 Basel

Rockv Flats Closure Project

Baseline Cost and Basis of Estimate

Proiect Baseline Devl
WBS Filter 1EEC
Activity Filter *

Starts In FY

Item - Checklists for Room Turnover Units - 1)Dollars 2)Hours Unit Cost - 1)1,200 2)23 Unit Cost Adjustment factor - None

Revised Unit Cost - N/A Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C103S Environmental Compliance	Linear	7.11	Hours

Factors 8 HOURS

750 STRAIGHT TIME BASE M020 MANAGERS (GRADE 69 - 72) C104S Closure Management Linear 0.89 Hours

Factors 1 HOUR

A5H SUBCONTRACTED SRVS 0000 NONE C104S Closure Management Linear 1.091.57 Dollars

Factors 1200 Dollars SubC Technical and Admin 1.02283 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - System

0.88934 [SYS 061400] .88934200 - System

Line Item A0PDD12-1EMC019025 - Building Rad Surveys

BOE

Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate.

Experience Item Desc - Building Radiological Surveys

Breakdown of Cost Data:

Item - Radiological Surveys for Facility

Units - 1)Dollars 2)Hours Unit Cost - 1)175,252 2)1,650

Unit Cost Adjustment factor - None

Revised Unit Cost - N/A

Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es		Cost Ele	ment		S	Skill		Department	Curve	Quantity	Units
	750	STRAIGHT TIME	BASE	E080	NUCLEAR (C	RITICALITY) ENGINEER	C104S	Closure Management	Linear	355	.74 Hours
	Factors	400 HOU	IRS								
-									0.88934 [SY	S 0614001.8893420) - Svstem
L	750	STRAIGHT TIME	BASE	M010	FOREMEN/1	TEAM LEADS / GROUP	C104S	Closure Management	Linear	613	.65 Hours
	Factors	690 HOU	IRS								
_									0.88934 [SY	S 0614001.8893420) - Svstem
	750	STRAIGHT TIME	BASE	M020	MANAGERS	(GRADE 69 - 72)	C104S	Closure Management	Linear	49	.80 Hours
	Factors	56 HOU	IRS								
_									0.88934 [SY	S 0614001.8893420) - Svstem
	750	STRAIGHT TIME	BASE	M020	MANAGERS	(GRADE 69 - 72)	C104S	Closure Management	Linear	125	.40 Hours
1	Factors	141 hour	S								
_									0.88934 [SY	S 0614001.8893420) - Svstem
	A5H	SUBCONTRACT	ED SRVS	0000	NONE		C104S	Closure Management	Linear	14.554	.33 Dollars
1	Factors	16000 Dolla	ars - SubC Technical and	d Admin	1.02283	FY00 Escalation					
-									0.88934 [SY	S 0614001.8893420) - Svstem
	A5H	SUBCONTRACT	ED SRVS	T050	RADIATION C	CONTROL TECHNOLIGI	KE10H	Indust/Site Srvs Steelworkers	Linear	144.863	.30 Dollars
	Factors	3456 HOU	IRS		46.08 Do	ollars/Hr.		1.02283 FY00 Escalation			

Line Item A0PDD13-1EMC019025 - Relocate Building Personnel

BOE

Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and

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Rocky Flats Closure Proiect
Baseline Cost and Basis of Estimate

Proiect
WBS Fill
WBS Fill

Proiect Baseline Devl
WBS Filter 1EEC
Activity Filter *

ilter * Starts In FY

0.88934 [SYS 061400] .88934200 - System

processes proprietary to B.865 deem historical costs unreliable as a basis for estimate. Experience Item Desc - Coordinate and implement transfer of personnel out of the Facility. Breakdown of Cost Data:

Item - Relocation of Building Personnel

Units - 1)Hours 2)Dollars Unit Cost - 1)1,096 2)21,632 Unit Cost Adjustment factor - None

Revised Unit Cost - N/A Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

WBS No:

Activity ID:

1EEC05

1EEC5002

es		C	ost Element		Skill		Department	Curve	Ouantity	Units
	750	STRAIGH1	TTIME BASE	E080	NUCLEAR (CRITICALITY) ENGINEER	C104S	Closure Management	Linear	71.15 H	Hours
	Factors	80	Hours							
г							T	0.88934 [SYS 06140	01 .88934200 - S ¹	vstem
L	750	STRAIGHT	TTIME BASE	L030	UTILITY WORKER	C242S	Transportation	Linear	249.02 H	lours
	Factors	280	Hours							
Г					1		I	0.88934 [SYS 06140		
L	750		TTIME BASE	L090	GENERAL LABORER	KE10H	Indust/Site Srvs Steelworkers	Linear	311.27 F	lours
1	Factors	350	hours							
Г								0.88934 [SYS 06140		
L	750		TTIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	C104S	Closure Management	Linear	80.04H	lours
	Factors	90	hours							
Г		T		T	I		T	0.88934 [SYS 06140		
L	750		TTIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	C104S	Closure Management	Linear	102.27 F	lours
1	Factors	115	hours							
Г					I		T _a .	0.88934 [SYS 06140		
L	750		TTIME BASE	M020	MANAGERS (GRADE 69 - 72)	C104S	Closure Management	Linear	17.79lF	lours
	Factors	20	hours						.,	
Г		070410117				0.10.10		0.88934 [SYS 06140		
L	750		TTIME BASE	M020	MANAGERS (GRADE 69 - 72)	C104S	Closure Management	Linear	17.79lF	lours
	Factors	20	hours					0.00004 [0.00.00440]	01 00004000 0	
Г	750	CTDAICLI	Γ TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C242C	Transportation	0.88934 [SYS 06140	01 .88934200 - S 57.81 h	
L		•		P170	OTHER ADMINISTRATIVE & PROFE	C2425	Transportation	Linear	37.81]	louis
	Factors	65	hours					0.88934 [SYS 06140	01 00004000 €	
Г	A5H	SLIBCONT	RACTED SRVS	0000	NONE	C1048	Closure Management	0.86934 1515 06140	2.910.87	
L		3200	Dollars SubC SME and Adr		1.02283 FY00 Escalation	C1045	Closure Management	Linear	2,910.6/JL	Joliais
	Factors	3200	Dollars SubC Sivie and Adi	nin sppi	1.02263 F100 Escalation			0.88934 [SYS 06140	01 00024200 6	votom
Γ	A5H	SLIBCONT	RACTED SRVS	T050	RADIATION CONTROL TECHNOLIGI	KE10H	Indust/Site Srvs Steelworkers	0.86934 1515 06140	16.766.59	
L		400		1000	46.08 Dollars/Hr.	KETUH	1.02283 FY00 Escalation	Lilleai	10,700.59 L	Julais
-	Factors	400	hours		40.00 Dollars/Hr.		1.02203 F100 ESCAIALION			

Line Item A0PDD15-1EMC019025 - Locker Room Cleanout

BOE

Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate.

Experience Item Desc - Plan, coordinate and carry out the cleanout of the facility locker room.

Breakdown of Cost Data:

Item - Locker Room Clean-out
Units - 1)Hours 2)Dollars
Unit Cost - 1)441 2)6,122
Unit Cost Adjustment factor - None
Revised Unit Cost - N/A
Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

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WBS No: 1EEC05 Activity ID: 1EEC5002

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect E
WBS Filter 1

Baseline Devl 1EEC

				Baseline Cost ar	ia Basis	of Estimate	Activity Filter *		Starts In FY	*
ırces	C	ost Element		Skill		Department		Curve	Quantity	Units
	750 STRAIGHT	TTIME BASE	E080	NUCLEAR (CRITICALITY) ENGINEER	C104S	Closure Management		Linear	3.56 H	Hours
	Factors 4	hours						0.88934 [SYS 061400)] .88934200 - <u>S</u>	ystem
	750 STRAIGHT	TTIME BASE	L030	UTILITY WORKER	C242S	Transportation		Linear	102.27 H	Hours
	Factors 115	hours	1		ı			0.88934 [SYS 061400)] .88934200 - S	ystem
	750 STRAIGHT	TTIME BASE	L090	GENERAL LABORER	KE10H	Indust/Site Srvs Steelworker	rs	Linear	102.27 H	Hours
	Factors 115	hours	.					0.88934 [SYS 061400)] .88934200 - S	ystem
	750 STRAIGHT	ΓTIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	C104S	Closure Management		Linear	33.79 H	Hours
	Factors 38	hours	ı		ı			0.88934 ISYS 061400)] .88934200 - S	vstem
L	750 STRAIGHT	TTIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	C104S	Closure Management		Linear	3.56 ⊦	Hours
	Factors 4	hours	T	T	T			0.88934 [SYS 061400		
L		TTIME BASE	M020	MANAGERS (GRADE 69 - 72)	C104S	Closure Management		Linear	35.57 H	Hours
	Factors 40	hours	Т	1	Т	ı		0.88934 [SYS 061400		
L	750 STRAIGHT	TTIME BASE	M020	MANAGERS (GRADE 69 - 72)	C104S	Closure Management		Linear	3.56 H	Hours
	Factors 4	hours	Г		T			0.88934 [SYS 061400		
L		TTIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KE10H	Indust/Site Srvs Steelworker	rs	Linear	102.27 F	Hours
	Factors 115	hours	ĭ		ı			0.88934 ISYS 061400		
L	A5H SUBCONT	RACTED SRVS		NONE	C104S	Closure Management		Linear	4.730.16	Dollars
	Factors 5200	Dollars SubC SME and adn	nin sppt	1.02283 FY00 Escalation				0.88934 ISYS 061400	01 .88934200 - S	vstem
	A5H SUBCONT	RACTED SRVS	T050	RADIATION CONTROL TECHNOLIGI	KE10H	Indust/Site Srvs Steelworker	rs	Linear	838.33	Oollars
	Factors 20	hours		46.08 Dollars/Hr.		1.02283 FY00 Escalation	า	0.88934 [SYS 061400)] .88934200 - S	vstem

Line Item A0PDD16-1EMC019025 - Utility Locker/Supply Cabinet Cleanout

BOE

Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate.

Experience Item Desc - Plan, coordinate and carry out cleanout of utility lockers and supply cabinets in the facility.

Breakdown of Cost Data:
Item - Locker Room Clean-Out
Units - 1)Hours 2)Dollars
Unit Cost - 1)667 2)2,400
Unit Cost Adjustment factor - None
Revised Unit Cost - N/A
Basis for adjustment - N/A

Cost Element

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resou	urce
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750	STRAIGHT TIME BASE	E080	NUCLEAR (CRITICALITY) ENGINEER	C104S	Closure Management	Linear	0.89 Hours
Factors	1 hour						
						0.88934 [SYS 06140	01 .88934200 - System
750	STRAIGHT TIME BASE	L030	UTILITY WORKER	KE10H	Indust/Site Srvs Steelworkers	Linear	51.58 Hours

Factors 58 hours

0.88934 [SYS 061400] .88934200 - System

Units

Curve

WBS No: 1EEC05 Activity ID: 1EEC5002

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1EEC

				Baseline Cost ar	nd Basis	of Estimate	Activity Filter *		Starts In FY *
750	STRAIGH	T TIME BASE	L090	GENERAL LABORER	KE10H	Indust/Site Srvs Steelworkers	3	Linear	51.58 Hours
Factors	58	hours							
	1					1		0.88934 [SYS 061	4001 .88934200 - Svstem
750	STRAIGH	T TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	C104S	Closure Management		Linear	1.78 Hours
Factors	2	hours							
					,	T		0.88934 [SYS 061	4001 .88934200 - Svstem
750	STRAIGH	T TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	C104S	Closure Management		Linear	12.45 Hours
Factors	14	hours							
								0.88934 [SYS 061	4001 .88934200 - System
750	STRAIGH	T TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C104S	Closure Management		Linear	3.56 Hours
Factors	4	hours							
								0.88934 [SYS 061	4001 .88934200 - System
750	STRAIGH	T TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C104S	Closure Management		Linear	2.67 Hours
Factors	3	hours							
	Ū							0.88934 [SYS 061	4001 .88934200 - Svstem
750	STRAIGH	T TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KF10H	Indust/Site Srys Steelworkers	1	Linear	409.81 Hours
Factors	10	hours	1 1000	46.08 Dollars/Hr.		madovoko oko okomoniok		Ellioui	100.011110010
uciors	10	nouis		40.00 Dollars/Fil.				0.88934 [SYS 061	4001 .88934200 - Svstem
750	STRAIGH	T TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KE10H	Indust/Site Srvs Steelworkers	3	Linear	51.58 Hours
Factors	58	hours							
								0.88934 [SYS 061	4001 .88934200 - System
A5H	SUBCONT	TRACTED SRVS	0000	NONE	C104S	Closure Management		Linear	2,183.15 Dollars
Factors	2400	Dollars SubC and admin s		1.02283 FY00 Escalation			<u>'</u>		_,
0.075	2100	25a. 5 Ca20 and damin o						0.88934 [SYS 061	400] .88934200 - System
								3.33001 610 001	.55,.5555 1255 57516111

Line Item A0PDD19-1EMC019025 - Combustible Loading Removal

BOE

Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate.

Experience Item Desc - Plan, coordinate and implement combustible loading removal from the facility.

Experience Item Desc - Plan, coordinate and implement combustible loading removal from the facility

Breakdown of Cost Data:

Item - Remove Combustible Loading
Units - 1)Dollars 2)Hours

Unit Cost - 1)2,886 2)35,224

Unit Cost Adjustment factor - None

Revised Unit Cost - N/A

Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s	Cost Element		Skill		Department	Curve	Ouantity	Units
750 STR	RAIGHT TIME BASE	E080	NUCLEAR (CRITICALITY) ENGINEER	C104S	Closure Management	Linear	12.45	Hours
Factors 1	4 hours							
						0.88934 [SYS 0614	001 .88934200 - \$	System
750 STR	RAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C104S	Closure Management	Linear	96.05	Hours
Factors 1	08 hours							
						0.88934 [SYS 0614	001 .88934200 - \$	System
750 STR	RAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C104S	Closure Management	Linear	13.34	Hours
Factors 1	5 hours							
						0.88934 [SYS 0614	001 .88934200 - \$	System
750 STR	RAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KE10H	Indust/Site Srvs Steelworkers	Linear	2.241.14	Hours
Factors 2	2520 hours							
						0.88934 [SYS 0614	001 .88934200 - \$	System
A5H SUE	BCONTRACTED SRVS	0000	NONE	C104S	Closure Management	Linear	10,915.75	Dollars
Factors 1	2000 Dollars SubC Technical & A	dmin Sp	ot 1.02283 FY00 Escalation					
						0.88934 [SYS 0614	001 .88934200 - 9	System

Rocky Flats Closure Project Project Baseline Devl Baseline Cost and Basis of Estimate Baseline Devl 1EEC

A5H SUBCONTRACTED SRVS T050 RADIATION CONTROL TECHNOLIGI KE10H Indust/Site Srys Steelworkers Linear

Factors 504 hours 46.08 Dollars/Hr. 1.02283 -- FY00 Escalation --

Line Item A0PDD20-1EMC019025 - Excess Chemical Removal

1EEC05

1EEC5002

0.88934 [SYS 061400] .88934200 - System

0.88934 [SYS 061400] .88934200 - System

Starts In FY

21.125.90 Dollars

ROF

WBS No:

Activity ID:

Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate.

Experience Item Desc - Plan, coordinate and implement excess chemical removal from the facility.

Breakdown of Cost Data:

Item - Excess Chemical Removal Units - 1)Dollars 2)Hours Unit Cost - 1)99,885 2)859 Unit Cost Adjustment factor - None Revised Unit Cost - N/A Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es		C	ost Element		Skill		Department	Curve	Quantity Units
Į	750	STRAIGH1	TIME BASE	E080	NUCLEAR (CRITICALITY) ENGINEER	C104S	Closure Management	Linear	9.78 Hours
	Factors	11	hours						
ſ		Т			_	1	T.	0.88934 [SYS 06140	01 .88934200 - Svstem
Į	750	STRAIGH1	TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	C104S	Closure Management	Linear	40.02 Hours
	Factors	45	hours						
r		Т			T		T.	0.88934 [SYS 06140	0] .88934200 - System
Į	750	STRAIGH1	TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C104S	Closure Management	Linear	6.23 Hours
	Factors	7	hours						
ı		Т			_	ı		0.88934 [SYS 06140	
Į	750	STRAIGH1	TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C104S	Closure Management	Linear	3.56 Hours
	Factors	4	hours						
ſ		T				ı		0.88934 [SYS 06140	0] .88934200 - System
Į	750		TIME BASE	S020	ENVIRONMENTAL SCIENTISTS	C104S	Closure Management	Linear	346.84 Hours
	Factors	390	hours						
ī		ı						0.88934 [SYS 06140	01 .88934200 - Svstem
Į	750		TIME BASE	S020	ENVIRONMENTAL SCIENTISTS	C104S	Closure Management	Linear	346.84lHours
	Factors	390	hours						
ı		ı						0.88934 [SYS 06140	01 .88934200 - Svstem
Į	A5H		RACTED SRVS		NONE	C104S	Closure Management	Linear	5.094.02 Dollars
	Factors	5600	Dollars SubC Technical & A	Admin Sp	pt 1.02283 FY00 Escalation				
ı		ı						0.88934 [SYS 06140	01 .88934200 - Svstem
Į	A5H		RACTED SRVS	0000	NONE		Analytical Laboratory Services	Linear	72.771.66 Dollars
	Factors	2500	Per Sample		32 Estimated required samples		1.02283 FY00 Escalation		
ſ					1		1	0.88934 [SYS 06140	01 .88934200 - Svstem
Į	A5H		RACTED SRVS	T050	RADIATION CONTROL TECHNOLIGI	KE10H	Indust/Site Srvs Steelworkers	Linear	12.994.11 Dollars
	Factors	46.08	Dollars/Hr.		310 Hours		1.02283 FY00 Escalation		

Line Item A0PDD23-1EMC019025 - Property Disposition/Management

BOE

Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate.

Experience Item Desc - Declaration and disposition of excess property.

Breakdown of Cost Data:

Item - Property Disposition/Management
Units - 1)Hours 3)Dollars

Unit Cost - 1)1,200 2)24,000

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WBS No: 1EEC05
Activity ID: 1EEC502

Rocky Flats Closure Project
Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filter

Baseline Devl 1EEC

Starts In FY

0.88934 [SYS 061400] .88934200 - System

0.88934 [SYS 061400] .88934200 - System

Unit Cost Adjustment factor - None Revised Unit Cost - N/A Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es		Cost Element	Skill	Department	Curve	Ouantity	Units
	750	STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C104S Closure Management	Linear	187.65	Hours

Factors 211 Hours - Building Manager/Property

750 STRAIGHT TIME BASE P170 OTHER ADMINISTRATIVE & PROFE C104S Closure Management Linear 533.61 Hours

Factors 600 Hours - Property Management &

 A5H
 SUBCONTRACTED SRVS
 0000
 NONE
 C104S
 Closure Management
 Linear
 21.831.50
 Dollars

Factors 24000 Dollars SubC SME and Admin sppt 1.02283 -- FY00 Escalation --

Line Item A0PDD25-1EMC019025 - Hazards Reduction Completion Mgmt Activities

BOE

Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate.

Experience Item Desc - Walkdowns, inspections, report generation, data turnover, issues identification and resolution for turnover to D&D.

Breakdown of Cost Data:

Item - Hazard Reduction activities completion and turnover to D&D.

Units - 1)Dollars 2)Hours Unit Cost - 1)6,000 2)289

Unit Cost Adjustment factor - None

Revised Unit Cost - N/A Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s	Cost	Element		Skill		Department	Curve	Ouantity	Units
75	STRAIGHT TI	ME BASE	E080	NUCLEAR (CRITICALITY) ENGINEER	C104S	Closure Management	Linear	51.58	Hours
Facto	rs 58 h	ours							
							0.88934 [SYS 061400	1 .88934200 - 5	System
75	STRAIGHT TI	ME BASE	M020	MANAGERS (GRADE 69 - 72)	C104S	Closure Management	Linear	35.57	Hours
Facto	rs 40 h	ours							
							0.88934 [SYS 061400	<u> 1 .88934200 - S</u>	System
75	STRAIGHT TI	ME BASE	M020	MANAGERS (GRADE 69 - 72)	C104S	Closure Management	Linear	17.79	Hours
Facto	rs 20 h	ours							
							0.88934 [SYS 061400	1 .88934200 - 9	System
75	STRAIGHT TI	ME BASE	S020	ENVIRONMENTAL SCIENTISTS	C104S	Closure Management	Linear	51.58	Hours
Facto	rs 58 h	ours							
							0.88934 ISYS 061400	1 .88934200 - 5	System
A5	H SUBCONTRA	CTED SRVS	0000	NONE	C104S	Closure Management	Linear	5.457.87	Dollars

Factors 6000 Dollars SubC SME and Admin Sppt 1.02283 -- FY00 Escalation --

Line Item A0PDD26-1EMC019025 - RMRS Closure Project Mgmt Oversight

BOE

Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate.

Experience Item Desc - Perform regular oversight and provide direction to B.865 Closure Project and Facility Management throughout the preparation for Hazards Reduction & D&D.

Breakdown of Cost Data:

Item - Closure Project Management & Project Oversight

Units - 1)Dollars 2)Hours

Unit Cost - 1)12,000 2)192

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WBS No: 1EEC05 Activity ID: 1EEC5002 Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Baseline Devl
WBS Filter 1EEC
Activity Filter *

Starts In FY

Unit Cost Adjustment factor - None Revised Unit Cost - N/A Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es		Cost Element	Skill	Department	Curve	<i>Ouantity</i>	Units
	750	STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C104S Closure Management	Linear	60.48	Hours

Factors 68 hours

A5H SUBCONTRACTED SRVS 0000 NONE C104S Closure Management Linear 10.915.75 Dollars

Factors 12000 Dollars - Dept. SubC SME & Admin 1.02283 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - System

BOE

Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate.

Experience Item Desc - Hot & Cold Laundry Support

Breakdown of Cost Data:

Item - Laundry costs for facility workers.

Units - 1)Dollars 2)Lot

Unit Cost - 1)110,400 2)160

Unit Cost Adjustment factor - None

Revised Unit Cost - N/A

Basis for adjustment - N/A

Line Item A0PDD27-1EMC019025 - Hot & Cold Laundry Support

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

ces		Cost Element	Skill		Department	Curve	Quantity	Units
	750	STRAIGHT TIME BASE	L030 UTILITY WORKER	KE10H	Indust/Site Srvs Steelworkers	Linear	142.29	Hours

Factors 160 hours

						0.88934 [SYS 0614	
A5R	MISC EXPENSES	0000	NONE	C104S	Closure Management	Linear	99.656.11 Dollars

Factors 110400 Dollars 1.015 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - System

BOE

Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate.

Experience Item Desc - Supplies and subcontracts, based on additional labor loading required to support the preparation for Hazards Reduction.

Breakdown of Cost Data:

Item - Miscellaneous Supplies/Subcontracts

Units - 1)Dollars

Unit Cost - 1)180,000

Unit Cost Adjustment factor - None

Line Item A0PDD28-1EMC019025 - Miscellaneous Supplies/Subcontracts

Revised Unit Cost - N/A

Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

ROF

es		Cost Element		Skill		Department	(Curve	Ouantity	Units
	A5C	SUPPLIES	0000 N	ONE	C104S	Closure Management		inear	162.482.80	1

Factors 180000 Dollars - Supplies (Material, PPE, 1.015 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - System

Line Item A0PDD29-1EMC019025 - Safety Support

Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance

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WBS No: 1EEC05 Activity ID: 1EEC5002

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Activity Filter

1EEC

Baseline Devl

Starts In FY

coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate.

Experience Item Desc - Safety support to maintain the facility safety envelope.

Breakdown of Cost Data:

Item - Industrial Safety and Hygiene Units - 1) Hours

Unit Cost - 1)1,810

Unit Cost Adjustment factor - None

Revised Unit Cost - N/A Basis for adjustment - N/A

Line Item A0PDD30-1EMC019025 - Analytical Services Support

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resource

rces		Cost Element		Skill	Department	Curve	Ouantity	Units
	750	STRAIGHT TIME BASE	E120	SAFETY ENGINEERS	C104S Closure Management	Linear	1.609.71	Hours

1810 Factors Hours

0.88934 [SYS 061400] .88934200 - System

BOE

Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate.

Experience Item Desc - Analytical Services support will be required to ensure worker safety is preserved throughout the preparation for Hazards Reduction

Breakdown of Cost Data: Item - Analytical Services Units - 1)Dollars Unit Cost - 1)160,000 Unit Cost Adjustment factor - None Revised Unit Cost - N/A

Basis for adjustment - N/A This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resource

ırces	Cost Element	Skill	Department	Curve	Quantity Units
	A5H SUBCONTRACTED SRVS	0000 NONE	K267S Analytical Laboratory Services	Linear	145,543.30 Dollars

Factors

160000 Dollars for Analytical Services

1.02283 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - System

BOE

Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate.

Experience Item Desc - Plan, coordinate and and ensure completion of all required JHAs & JSAs.

Breakdown of Cost Data:

Line Item A0PDD31-1EMC019025 - JHA/JSA Development

Item - JHA and JSA Development Units - 1)Dollars 2)Hours Unit Cost - 1)13,200 2)200 Unit Cost Adjustment factor - None Revised Unit Cost - None Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es		Cost Element	Skill			Department	Curve	<i>Ouantity</i>	Units
	750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	35.57	Hours
	Enstana	40 hours							

Factors 40 hours

_						0.88934	ISYS 0614001 .88934200 - System	n
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Line	ar 35.57 Hours	5
Factors	40 hours							

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WBS No: 1EEC05
Activity ID: 1EEC5002

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
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750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Linear	35.57 Hours
Factors	40 hours						
						0.88934 [SYS 06140	01 .88934200 - Svstem
750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	C104S	Closure Management	Linear	35.57 Hours
Factors	40 hours						
						0.88934 [SYS 06140	01 .88934200 - Svstem
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C104S	Closure Management	Linear	12.45 Hours
Factors	14 hours						
						0.88934 [SYS 06140	01 .88934200 - Svstem
A5H	SUBCONTRACTED SRVS	0000	NONE	C104S	Closure Management	Linear	12.007.32 Dollars

Factors 13200 Dollars SubC SME & Admin sppt 1.02283 -- FY00 Escalation --

Line Item A0PDD32-1EMC019025 - ASP Development

BOE

Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate.

Experience Item Desc - Plan, coordinate and participate in ASP Development (AB Revision) for the facility.

Breakdown of Cost Data:
Item - Develop ASP
Units - 1)Hours 2)Dollars
Unit Cost - 1)275 2)3,360
Unit Cost Adjustment factor - None
Revised Unit Cost - N/A
Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es		(Cost Element		Skill		Department	Curve	Quantity	Units
	750	STRAIGH	T TIME BASE	E080	NUCLEAR (CRITICALITY) ENGINEER	C104S	Closure Management	Linear	71.15	Hours
F	actors	80	Hours							
								0.88934 [SYS 06140	01 .88934200 - 9	3ystem
L	750	STRAIGH	T TIME BASE	E080	NUCLEAR (CRITICALITY) ENGINEER	C104S	Closure Management	Linear	71.15	Hours
F	actors	80	Hours							
_								0.88934 [SYS 06140	01 .88934200 - \$	Svstem
	750	STRAIGH	T TIME BASE	E120	SAFETY ENGINEERS	C104S	Closure Management	Linear	13.34	Hours
F	actors	15	Hours							
_								0.88934 [SYS 06140	01 .88934200 - 9	Svstem
	750	STRAIGH	T TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C104S	Closure Management	Linear	6.23	Hours
F	actors	7	Hours - Participation							
								0.88934 [SYS 06140	01 .88934200 - \$	System
	750	STRAIGH	T TIME BASE	S020	ENVIRONMENTAL SCIENTISTS	C104S	Closure Management	Linear	71.15	Hours
F	actors	80	Hours							
_								0.88934 [SYS 06140	01 .88934200 - \$	System
	A5H	SUBCON	TRACTED SRVS	0000	NONE	C104S	Closure Management	Linear	3.056.41	Dollars
F	actors	3360	Dollars SubC SME and adn	nin sppt	1.02283 FY00 Escalation					

Line Item A0PDD33-1EMC019025 - Hazard Assessment Safety Plan

BOE

Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate.

Experience Item Desc - Plan, coordinate and participate in the preparation of a Hazard Assessment Safety Plan for conducting Hazards Reduction activities. RMRS ESH&Q will collect and prepare the Hazard Assessment Safety Plan.

Breakdown of Cost Data:

Item - Hazard Assessment Safety Plan

Units - 1) Hours 2) Dollars

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Rocky Flats Closure Project
Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filter

Baseline Devl 1EEC

Starts In FY *

Unit Cost - 1)367 2)1,200 Unit Cost Adjustment factor - None Revised Unit Cost - N/A Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

WBS No:

Activity ID:

1EEC05

1EEC5002

es			Cost Element		·	Skill		Department	Curve	Ouantity	Units
	750	STRAIGH	T TIME BASE	E080	NUCLEA	R (CRITICALITY) ENGINEER	C104S	Closure Management	Linear	51.23	Hours
1	Factors	28.8	Hours/Week		2	Weeks					
		,							0.88934 [SYS 06	14001 .88934200 - \$	Svstem
L	750	STRAIGH	T TIME BASE	E120	SAFETY	ENGINEERS	C104S	Closure Management	Linear	224.11	Hours
1	Factors	84	Hours/Week		3	Weeks					
_		T			1				0.88934 [SYS 06	14001 .88934200 - \$	Svstem
L	750	STRAIGH	T TIME BASE	M020	MANAGE	RS (GRADE 69 - 72)	C104S	Closure Management	Linear	12.81	Hours
1	Factors	2	Weeks		7.2	Hours/Week Facility Manage	er				
_					1				0.88934 [SYS 06	14001 .88934200 - \$	Svstem
L	750	STRAIGH	T TIME BASE	M020	MANAGE	RS (GRADE 69 - 72)	C104S	Closure Management	Linear	12.81	Hours
1	Factors	7.2	Hours/Week		2	Weeks					
_					1			T	0.88934 [SYS 06	14001 .88934200 - \$	Svstem
L	750	STRAIGH	T TIME BASE	S020	ENVIRON	NMENTAL SCIENTISTS	C104S	Closure Management	Linear	25.61	Hours
1	Factors	14.4	Hours Week		2	Weeks					
_					1				0.88934 [SYS 06	14001 .88934200 - \$	Svstem
L	A5H	SUBCON	TRACTED SRVS	0000	NONE		C104S	Closure Management	Linear	1.091.57	Dollars
1	Factors	1200	Dollars SubC SME and adn	nin sppt	1.02283	3 FY00 Escalation					

Line Item A0PDD34-1EMC019025 - Rad Hazard Characterization

0.88934 [SYS 061400] .88934200 - System

BOE

Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate.

Experience Item Desc - Plan, coordinate and monitor completion of preliminary facility radiological characterization by facility RCTs and Rad Engineering.
Breakdown of Cost Data:

Breakdown of Cost Data. | Item - Radiological Hazard Characterization

Units - 1)Hours 2)Dollars

Unit Cost - 1)104 2)8,973

Unit Cost Adjustment factor - None

Revised Unit Cost - N/A Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s	Cost Element	Skill			Department	Curve	Ouantity	Units
75	0 STRAIGHT TIME BASE	E080	NUCLEAR (CRITICALITY) ENGINEER	C104S	Closure Management	Linear	7.11	Hours
Fact	ors 1 Hour/Week Rad Engineer S	ppt	8 Weeks					
						0.88934 [SYS 06140	01.88934200 - \$	System
75	0 STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	C104S	Closure Management	Linear	49.80	Hours
Fact	ors 56 Hours RCT Supervision							
						0.88934 [SYS 06140	01 .88934200 - \$	System
75	0 STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C103S	Environmental Compliance	Linear	7.11	Hours
Fact	ors 1 Hour/Week Planning, direction	ing	8 Weeks					
						0.88934 [SYS 06140	01 .88934200 - \$	System
75	0 STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C104S	Closure Management	Linear	14.23	Hours
Fact	ors 8 Weeks		2 Hours/Week Bldg. Shft Mgr					
						0.88934 [SYS 06140	01 .88934200 - 9	System

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WBS No: 1EEC05 Baseline Devl Proiect **Rocky Flats Closure Project** 1EEC Activity ID: 1EEC5002 WBS Filter **Baseline Cost and Basis of Estimate** Activity Filter 750 STRAIGHT TIME BASE M020 MANAGERS (GRADE 69 - 72) C104S Closure Management Linear Factors Hours/Week Coordination, Monitoring 8 Weeks

A5H SUBCONTRACTED SRVS 0000 NONE C104S Closure Management Linear 1.455.43 Dollars

Factors 1600 Dollars SubC SME and admin sppt 1.02283 -- FY00 Escalation --

A5H SUBCONTRACTED SRVS T050 RADIATION CONTROL TECHNOLIGI KE10H Indust/Site Srvs Steelworkers Linear 6.706.64 Dollars

Factors 20 Hours/Week Surveys 8 Weeks 46.08 Dollars/Hr. 1.02283 -- FY00 Escalation --

Factors 20 Hours/Week Surveys 8 Weeks 46.08 Dollars/Hr. 1.02283 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - System

0.88934 [SYS 061400] .88934200 - System

Starts In FY

14.23 Hours

Line Item A0PDD35-1EMC019025 - Facility Be Characterization

BOE

Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate.

Experience Item Desc - Plan, coordinate and monitor completion of a facility Be characterization by the Industrial Hygiene department.

Breakdown of Cost Data: Item - 1)Hours 2)Dollars Units - 1)241 2)6,889

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es		Cost Elem	ent		S	Skill		Department	С	urve	Quantity	Units
L	750	STRAIGHT TIME E	BASE	E080	NUCLEAR (C	RITICALITY) ENGINEER	C104S	Closure Management	Li	near	3.56	Hours
	Factors	4 hours										
-		_							0.88934	[SYS 06140	0] .88934200 - 3	System
L	750	STRAIGHT TIME	BASE	M010	FOREMEN /	TEAM LEADS / GROUP	C104S	Closure Management	Li	near	28.46	Hours
	Factors	32 hours										
-		_							0.88934	[SYS 06140	0] .88934200 - 3	System
L	750	STRAIGHT TIME E	BASE	M020	MANAGERS	(GRADE 69 - 72)	C104S	Closure Management	Li	near	11.56	Hours
	Factors	13 hours										
-									0.88934	ISYS 06140	01 .88934200 - \$	Svstem
L	750	STRAIGHT TIME	BASE	M020	MANAGERS	(GRADE 69 - 72)	C104S	Closure Management	Li	near	3.56	Hours
1	Factors	4 hours										
-				1					0.88934	ISYS 06140	01 .88934200 - 3	Svstem
L	750	STRAIGHT TIME	BASE	P090	INDUSTRIAL	HYGIENISTS	C104S	Closure Management	Li	near	102.27	Hours
1	Factors	115 hours										
-				1					0.88934	ISYS 06140	01 .88934200 - 3	Svstem
L	750	STRAIGHT TIME	BASE	S020	ENVIRONME	NTAL SCIENTISTS	C104S	Closure Management	Li	near	42.69	Hours
1	Factors	48 hours										
-				1					0.88934	ISYS 06140	01 .88934200 - 3	Svstem
L	A5H	SUBCONTRACTE	D SRVS	0000	NONE		C104S	Closure Management	Li	near	1.455.43	Dollars
1	Factors	1600 Dollars	s SubC SME and admir	n sppt	1.02283	FY00 Escalation						
-									0.88934	ISYS 06140	01 .88934200 - 3	System
L	A5H	SUBCONTRACTE	D SRVS	T050	RADIATION (CONTROL TECHNOLIGI	KE10H	Indust/Site Srvs Steelworkers	S Li	near	4.820.39	Dollars
	Factors	115 hours			46.08 Do	ollars/Hr.		1.02283 FY00 Escalation				

Line Item A0PDD36-1EMC019025 - Additional Reviews (Price-Anderson, ORC, etc.)

BOE

Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate.

Experience Item Desc - Probable inspections, walkdowns, oversight and preparatory work to be performed in the course of preparation for Hazards Reduction. Breakdown of Cost Data:

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 WBS No:
 1EEC05

 Activity ID:
 1EEC5002

Rockv Flats Closure Project Baseline Cost and Basis of Estimate Proiect Baseline Devl WBS Filter 1EEC Activity Filter *

Starts In FY *

Item - Additional Reviews for Hazards Reduction.

Units - 1)Dollars 2)Hours Unit Cost - 1)33,360 2)960

Unit Cost Adjustment factor - None

Revised Unit Cost - N/A Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Re	sοι	ırc	es
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		Cost Element		Skill		Department	Curve	Ouantity Units
750		T TIME BASE	E050	ENVIRONMENTAL ENGINEERS	C104S	Closure Management	Linear	71.15 Hours
Factor	s 80	Hours					0.00004 [CVC.0644	001 00024200 Custom
750	STRAIGH.	T TIME BASE	E050	ENVIRONMENTAL ENGINEERS	C104S	Closure Management	0.86934 1515 0614 Linear	001 .88934200 - Svstem 71.15 Hours
Factor		Hours	LUUU	TENVINORIVIENTAL ENGINEERO	1 01040	TOTOSQUE WAITAGETTETT	Linear	71.101110013
							0.88934 [SYS 0614	001 .88934200 - Svstem
750		T TIME BASE	E050	ENVIRONMENTAL ENGINEERS	K109S	Env Svs. Stewardship & Compliance	Linear	71.15 Hours
Factor	s 80	Hours						
750	STD VICH.	T TIME BASE	E120	SAFETY ENGINEERS	C104S	Closure Management	0.88934 ISYS 0614 Linear	001 .88934200 - Svstem 71.15 Hours
Factor		Hours	1 E120	ISAFETT ENGINEERS	C1043	Closure Management	Lilledi	/ I.ISINUUIS
T deloi		110010					0.88934 [SYS 0614	001 .88934200 - Svstem
750	STRAIGH	T TIME BASE	E120	SAFETY ENGINEERS	C104S	Closure Management	Linear	71.15 Hours
Factor	s 80	Hours						
750	CTDAIGH	T TIME BASE	F400	OTHER ENGINEERS	1/04.40	Re-Engineering		001 .88934200 - Svstem 71.15 Hours
750		Hours	I E130	OTHER ENGINEERS	K2145	Re-Endineerind	Linear	/1.15IHOURS
rucioi	3 00	Tiouis					0.88934 [SYS 0614	001 .88934200 - Svstem
750	STRAIGH	T TIME BASE	P050	COMPLIANCE INSPECTORS	C103S	Environmental Compliance	Linear	71.15 Hours
Factor	s 80	Hours						
			1	T				001 .88934200 - Svstem
750	•	T TIME BASE	P050	COMPLIANCE INSPECTORS	C104S	Closure Management	Linear	71.15 Hours
Factor	s 80	Hours					0.88934 ISVS 0614	001 .88934200 - Svstem
750	STRAIGH	T TIME BASE	P050	COMPLIANCE INSPECTORS	C104S	Closure Management	Linear	71.15 Hours
Factor	s 80	Hours						
			1	T				001 .88934200 - Svstem
750		T TIME BASE	P050	COMPLIANCE INSPECTORS	K100S	Kaiser-Hill	Linear	71.15 Hours
Factor	s 80	Hours					0.00034 [CVC.0614	001 .88934200 - Svstem
750	STRAIGH	T TIME BASE	P090	INDUSTRIAL HYGIENISTS	C104S	Closure Management	U.86934 1313 0614	71.15 Hours
Factor		Hours - IH Input to review:		THE STATE OF THE S	1 01010	TORONIO INGLIGACIONE	Elliodi	7 1.101110010
	1		1		1		0.88934 [SYS 0614	001 .88934200 - Svstem
750		T TIME BASE	S090	OTHER SCIENTISTS	K213S	Insurance Program Mamt	Linear	71.15 Hours
Factor	s 80	Hours					0.00004 101/2	
A5H	CLIDCONI	TRACTED SRVS	0000	NONE	C1049	Closure Management	0.88934 [SYS 0614 Linear	001 .88934200 - Svstem 27.289.37 Dollars
Factor		Dollars	1 0000	1.02283 FY00 Escalation	L C 1045	Ciosure Management	Linear	21.269.3/1D0llars
- 40101		Donaid		1.02200 1 100 E30alati011			0.88934 [SYS 0614	001 .88934200 - Svstem
A5H	SUBCONT	TRACTED SRVS	0000	NONE	C104S	Closure Management	Linear	3.056.41 Dollars

Line Item A0PDD37-1EMC019025 - QA Reviews

0.88934 ISYS 0614001.88934200 - Svstem

BOE

Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance

WBS No: 1EEC05 Activity ID: 1EEC5002

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
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Activity Filter

Filter 1EEC

Baseline Devl

Starts In FY

coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate.

Experience Item Desc - Plans and procedures created out of the preparation for Hazards Reduction process.

Breakdown of Cost Data:

Item - Quality Assurance Reviews

Units - 1)Hours Unit Cost - 1)200

Unit Cost Adjustment factor - None

Revised Unit Cost - N/A Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es	Cost Element		Skill	Department	Curve	<i>Ouantity</i>	Units
	A5H	SUBCONTRACTED SRVS	E110 QUALITY CONTROL ENGINEERS	C104S Closure Management	Linear	5.870.85	Dollars

Factors 6454 Prime Dollars

1.02283 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - System

Curve

Units

Line Item A1DD01-1EMC019025 - D&D Planning Phase BOE Estimators Experience - This est

Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate.

Experience Item Desc - D&D Planning Phase; Plans will include, but are not necessarily limited to; the Hazards Reduction, the D&D Project Execution Plan, Risk and Contingency Analysis for the D&D phase, Environmental Readiness Evaluation, Subcontract Statement of Work Development, etc. Estimate assumes that planning processes will incorporate lessons learned from B123 & the 207 Clarifier D&D planning processes as well as information specifically collected in the Hazards Reduction activities. Estimate assumes simplified planning based on advanced preparation of the facility for D&D carried out under LL and Hazards Reduction efforts. Project Close-out Reporting

Breakdown of Cost Data:
Item - D&D Planning Phase
Units - 1)Hours 2)Dollars
Unit Cost - 1)4,200 2)98,767
Unit Cost Adjustment factor - None
Revised Unit Cost - N/A
Basis for adjustment - N/A

Cost Element

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

750 STRAIGHT TIME BASE	E020	CIVIL ENGINEERS	C104S	Closure Management	Linear	462.46 Hours
Factors 520 Hours - Safe	e Shutdown Design					
			,		0.88934 [SYS 061400].	88934200 - Svstem
750 STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	C104S	Closure Management	Linear	462.46 Hours
Factors 520 hours						
			I		0.88934 [SYS 061400].	88934200 - Svstem
750 STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	C104S	Closure Management	Linear	160.08 Hours
Factors 180 hours						
					0.88934 [SYS 061400]	88934200 - Svstem
750 STRAIGHT TIME BASE	E070	MECHANICAL ENGINEERS	C104S	Closure Management	Linear	462.46 Hours
Factors 520 Hours - Safe	e Shutdown Design					
					0.88934 [SYS 061400].	88934200 - Svstem
750 STRAIGHT TIME BASE	E070	MECHANICAL ENGINEERS	C104S	Closure Management	Linear	462.46 Hours
Factors 520 hours						
					0.88934 [SYS 061400].	88934200 - Svstem
750 STRAIGHT TIME BASE	E080	NUCLEAR (CRITICALITY) ENGINEER	C104S	Closure Management	Linear	177.87 Hours
Factors 200 hours						
					0.88934 [SYS 061400].	88934200 - Svstem
750 STRAIGHT TIME BASE	E120	SAFETY ENGINEERS	C104S	Closure Management	Linear	462.46 Hours
Factors 520 hours						
		•			0.88934 [SYS 061400].	88934200 - Svstem

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WBS No: 1EEC05
Activity ID: 1EEC5002

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Proiect WBS Filter

Baseline Devl 1EEC

				Baseline Cost an	id Basis	of Estimate	Activity Filter	*	Starts In FY *
750	STRAIGHT	ΓTIME BASE	M020	MANAGERS (GRADE 69 - 72)	C103S	Environmental Compliance		Linear	18.68 Hours
Factors	21	hours							
	1		1	1				0.88934 ISYS 0614	001 .88934200 - Svstem
750		TTIME BASE		MANAGERS (GRADE 69 - 72)	C104S	Closure Management		Linear	56.03 Hours
Factors	63	hours Facility/Bldg./Shft Mc	ır						
									001 .88934200 - Svstem
750		TTIME BASE	P050	COMPLIANCE INSPECTORS	C104S	Closure Management		Linear	160.08 Hours
Factors	180	hours							
750	OTD A IOLIS	E TIME DAGE	D450	TDAINEDO	04040	O. M.			001 .88934200 - Svstem
750		TTIME BASE	P150	TRAINERS	C104S	Closure Management		Linear	124.51 Hours
Factors	140	hours						0.00004 [0.00.0044	001 00004000 0
A5H	CLIDOONIT	RACTED SRVS	0000	NONE	04040	Closure Management			001 .88934200 - Svstem 7.277.17 Dollars
		Dollars SubC SME and adr		1.02283 FY00 Escalation	C1045	Closure Management		Linear	7.277.171Dollars
Factors	8000	Dollars SubC Sivie and adr	nin Sppt	1.02263 FY00 Escalation				0.00034 [6/6.0644	001 .88934200 - Svstem
A5H	SUBCONT	RACTED SRVS	E040	ELECTRICAL ENGINEERS	C104S	Closure Management		U.00934 1313 0014	21.270.57 Dollars
Factors		dollars - Safe Shutdown De		1.02283 FY00 Escalation	01040	Closure Management		Lincai	21.270.071D011a13
uciors	20000.4	dollars date dilatadwii De	Joigin	1.02200 1 100 Escalation				0.88934 [SYS 0614	001 .88934200 - System
A5H	SUBCONT	RACTED SRVS	F110	QUALITY CONTROL ENGINEERS	C104S	Closure Management		Linear	15.264.22 Dollars
Factors		Prime Dollars		1.02283 FY00 Escalation					, oleo ileele oligio
								0.88934 [SYS 0614	001 .88934200 - Svstem
A5H	SUBCONT	RACTED SRVS	E130	OTHER ENGINEERS	C104S	Closure Management		Linear	21,270.57 Dollars
Factors	23383.4	dollars		1.02283 FY00 Escalation					
								0.88934 [SYS 0614	00] .88934200 - System
A5H	SUBCONT	RACTED SRVS	M050	COMPANY PRESIDENT AND VPs (G	C104S	Closure Management		Linear	40,024.41 Dollars
Factors	44000	Dollars (est) Legal support	(contract	s, 1.02283 FY00 Escalation					
					,			0.88934 [SYS 0614	00] .88934200 - System
A5H	SUBCONT	RACTED SRVS	P030	BUYERS PROCUREMENT AND CON	C104S	Closure Management		Linear	5,730.77 Dollars
Factors	140	hours		45 estimated \$/hr - RMRS Corp)	1.02283 FY00 Escalation			
								0.88934 [SYS 0614	00] .88934200 - System

Line Item A1DD02-1EMC019025 - Estb. Bldg Ventilation Shutdown Rqmts

BOE

Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate.

Experience Item Desc - Decontamination of facility ventilation systems prior to shutdown and dismantlement of the system, leading to initiation of the D&D process;

Breakdown of Cost Data:

Item - Building Ventilation Shutdown Requirements

Units - 1)Hours 2)Dollars

Unit Cost - 1)602 2)10,763

Unit Cost Adjustment factor - None

Revised Unit Cost - N/A

Basis for adjustment - $\ensuremath{\mathrm{N/A}}$

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

S Cost Element		Skill		Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	76.48	Hours
Factors 86 hours							
					0.88934 [SYS 06140	01 .88934200 - 9	Svstem
750 STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	C104S	Closure Management	Linear	76.48	Hours
Factors 86 hours							
					0.88934 [SYS 06140	01 .88934200 - 9	Svstem

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WBS No: 1EEC05 Baseline Devl Proiect Rocky Flats Closure Project 1EEC5002 1EEC Activity ID: WBS Filter **Baseline Cost and Basis of Estimate** <u>Activi</u>ty Filter Starts In FY 750 STRAIGHT TIME BASE M010 FOREMEN / TEAM LEADS / GROUP C104S Closure Management 76.48 Hours Linear Factors 86 hours 0.88934 [SYS 061400] .88934200 - System 750 STRAIGHT TIME BASE M010 FOREMEN / TEAM LEADS / GROUP C104S Closure Management 76.48 Hours Linear 86 hours Factors 0.88934 [SYS 061400] .88934200 - System P090 INDUSTRIAL HYGIENISTS 750 STRAIGHT TIME BASE C104S Closure Management 76.48 Hours Linear Factors 86 hours 0.88934 [SYS 061400] .88934200 - System STRAIGHT TIME BASE S020 ENVIRONMENTAL SCIENTISTS C104S Closure Management Linear 76.48 Hours 86 hours **Factors** 0.88934 [SYS 061400] .88934200 - System T060 D&D HAZ REDUC TECH / RISK RED | KE10H | Indust/Site Srvs Steelworkers 76.48 Hours 750 STRAIGHT TIME BASE Linear Factors hours 0.88934 [SYS 061400] .88934200 - System A5H SUBCONTRACTED SRVS 0000 NONE C103S Environmental Compliance 6.185.59 Dollars Linear Factors Dollars SubC SME and Admin Sppt 1.02283 -- FY00 Escalation --0.88934 [SYS 061400] .88934200 - System 3.604.82 Dollars A5H SUBCONTRACTED SRVS T050 RADIATION CONTROL TECHNOLIGI | KE10H | Indust/Site Srvs Steelworkers Linear Factors 86 hours 46.08 Dollars/Hr. 1.02283 -- FY00 Escalation --0.88934 [SYS 061400] .88934200 - System Line Item A1DD03-1EMC019025 - Develop RadCon Entry Requirements Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of BOE nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate. Experience Item Desc - Perform Hazards Reduction and DwD work activities identified and incorporated into procedures and work plans to comply with Radiological Control requirements. Breakdown of Cost Data: Item - Develop RadCon Entry Requirements Units - 1) Hours 2) Dollars Unit Cost - 1)990 2)8,250 Unit Cost Adjustment factor - None Revised Unit Cost - N/A Basis for adjustment - N/A This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions. Units Resources Cost Element Curve Quantity 750 STRAIGHT TIME BASE E080 NUCLEAR (CRITICALITY) ENGINEER C104S Closure Management Linear 176.09 Hours Factors 198 hours 0.88934 [SYS 061400] .88934200 - System M020 MANAGERS (GRADE 69 - 72) C104S Closure Management 62.25 Hours 750 STRAIGHT TIME BASE Linear Factors 70 hours 0.88934 [SYS 061400] .88934200 - System P090 INDUSTRIAL HYGIENISTS C103S Environmental Compliance STRAIGHT TIME BASE Linear 176.09 Hours Factors 198 Hours

P160 TECHNICAL WRITERS AND EDITOR | C104S | Closure Management

C104S Closure Management

S020 ENVIRONMENTAL SCIENTISTS

750

Factors

750

Factors

STRAIGHT TIME BASE

STRAIGHT TIME BASE

hours

hours

198

198

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0.88934 [SYS 061400] .88934200 - System

0.88934 [SYS 061400] .88934200 - System

0.88934 [SYS 061400] .88934200 - System

Linear

Linear

176.09 Hours

176.09 Hours

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
*

Baseline Devl
1EEC
*

A5H SUBCONTRACTED SRVS 0000 NONE C104S Closure Management Linear 7.504.58 Dollars

Factors 8250 Dollars SubC and admin sppt 1.02283 -- FY00 Escalation --

Line Item A1DD04-1EMC019025 - Develop Health/Safety/Emergency Prep. Entry Rqmts

BOE

WBS No:

Activity ID:

1EEC05

1EEC5002

Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate.

Experience Item Desc - Health, Safety, and Emergency Preparedess requirements to perform Hazards Reduction and D&D work activities will be identified, evaluated and incorporated into procedures and work plans to comply with site and State requirements

Breakdown of Cost Data:

Item - Develop Health, Safety, Emergency Preparedness Entry Requirements

Units - 1)Hours 2)Dollars Unit Cost - 1)396 2)8,500 Unit Cost Adjustment factor -None

Revised Unit Cost - N/A Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es	Cost Element		Skill	Department	Curve	Quantity	Units
	750	STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C104S Closure Management	Linear	62.25	Hours

Factors 70 hours

 A5H
 SUBCONTRACTED SRVS
 0000
 NONE
 C104S
 Closure Management
 Linear
 7.731.99|Dollars

Factors 8500 Dollars - SubC SME and Admin 1.02283 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - System

0.88934 [SYS 061400] .88934200 - System

Starts In FY

0.88934 [SYS 061400] .88934200 - System

Line Item A1DD05-1EMC019025 - Develop HazMat Exposure Protection Plan

BOE

Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate.

Experience Item Desc - HazMat exposure in the course of Hazards Reduction and D&D work activities will be identified, evaluated and precautionary measures will be incorporated into procedures and work plans to comply with HazMat Exposure control requirements

Breakdown of Cost Data:

Item - Develop HazMat Exposure Protection Plan

Units - 1)Hours 2)Dollars Unit Cost - 1)960 2)6,800

Unit Cost Adjustment factor - None

Revised Unit Cost - N/A Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es		(Cost Element			Skill		Department	C	urve	Quantity	Units	
	750	STRAIGH	IT TIME BASE	E08	NUCL	LEAR (CRITICALITY) ENGINEER	C104S	Closure Management	Li	near	142.29	Hours	
	Factors	160	Hours						0.88934	[SYS 06140	01 .88934200 - \$	Svstem	
Г													

 750
 STRAIGHT TIME BASE
 M020
 MANAGERS (GRADE 69 - 72)
 C104S
 Closure Management
 Linear
 49.80 Hours

 Factors
 56
 hours

750 STRAIGHT TIME BASE P090 INDUSTRIAL HYGIENISTS C104S Closure Management Linear 142.29 Hours

Factors 160 Hours

WBS No: 1EEC05 Baseline Devl Proiect Rocky Flats Closure Project 1EEC5002 1EEC Activity ID: WBS Filter **Baseline Cost and Basis of Estimate** <u>Activi</u>ty Filter Starts In FY 750 STRAIGHT TIME BASE P160 TECHNICAL WRITERS AND EDITOR | C104S | Closure Management 142.29 Hours Linear Factors 160 Hours 0.88934 [SYS 061400] .88934200 - System 750 STRAIGHT TIME BASE S020 ENVIRONMENTAL SCIENTISTS C104S Closure Management 142.29 Hours Linear 160 Hours Factors 0.88934 [SYS 061400] .88934200 - System STRAIGHT TIME BASE S020 ENVIRONMENTAL SCIENTISTS C104S Closure Management 142.29 Hours Factors 160 Hours 0.88934 [SYS 061400] .88934200 - System SUBCONTRACTED SRVS 0000 NONE C104S Closure Management Linear 6.185.59 Dollars 6800 Dollars - SubC SME and Admin Sppt 1.02283 -- FY00 Escalation --Factors 0.88934 [SYS 061400] .88934200 - System Line Item A1DD06-1EMC019025 - Building Ventilation Study Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of BOE nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate. Experience Item Desc - The facility ventilation system will be studied to identify probable levels of contamination and decontamination methodologies which will be incorporated into ventilation shutdown requirements. Breakdown of Cost Data: Item - Building Ventilatio Study Units - 1) Hours 2) Dollars Unit Cost - 1)1,092 2)29,124 Unit Cost Adjustment factor - None Revised Unit Cost - N/A Basis for adjustment - N/A This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions. Units Resources STRAIGHT TIME BASE E020 CIVIL ENGINEERS C104S Closure Management Linear 177.87 Hours Factors 200 Hours 0.88934 [SYS 061400] .88934200 - System STRAIGHT TIME BASE E080 NUCLEAR (CRITICALITY) ENGINEER C103S Environmental Compliance 176.09 Hours Linear Hours - Rad Engineering Support 0.88934 [SYS 061400] .88934200 - System M010 FOREMEN / TEAM LEADS / GROUP | C104S | Closure Management 750 STRAIGHT TIME BASE 88.93 Hours Linear 100 Hours - RCT Supervision **Factors** 0.88934 [SYS 061400] .88934200 - System 62.25 Hours 750 STRAIGHT TIME BASE M020 MANAGERS (GRADE 69 - 72) C104S Closure Management Linear Factors 70 Hours - Group/Project Study 0.88934 [SYS 061400] .88934200 - System M020 MANAGERS (GRADE 69 - 72) C104S Closure Management 62.25 Hours STRAIGHT TIME BASE Linear Factors Hours - Closure Project 0.88934 [SYS 061400] .88934200 - System C104S Closure Management SUBCONTRACTED SRVS 0000 NONE Linear 9.096.46 Dollars Factors 10000 Dollars - SubC Study Support 1.02283 -- FY00 Escalation --0.88934 [SYS 061400] .88934200 - System C104S Closure Management 9.096.46 Dollars SUBCONTRACTED SRVS 0000 NONE Linear

C104S Closure Management

1.02283 -- FY00 Escalation --

1.02283 -- FY00 Escalation --

E130 OTHER ENGINEERS

10000 Dollars - SubC Study Support

A5H SUBCONTRACTED SRVS

8242.74 Prime Dollars

Factors

Factors

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0.88934 [SYS 061400] .88934200 - System

0.88934 [SYS 061400] .88934200 - System

Linear

7.497.97 Dollars

WBS No: 1EEC05 Baseline Devl Proiect **Rocky Flats Closure Project** Activity ID: 1EEC5002 WBS Filter 1EEC **Baseline Cost and Basis of Estimate**

Activity Filter Starts In FY A5H SUBCONTRACTED SRVS T050 RADIATION CONTROL TECHNOLIGI KE10H Indust/Site Srvs Steelworkers Linear 8.299.46 Dollars

Factors 198 Hours - Rad Surveys 46.08 Dollars/Hr. 1.02283 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - System

Ouantity

Units

Curve

Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate.

Experience Item Desc - The facility lighting system will be studied to identify on-going lighting requirements and a phased shutdown methodology which will be implemented to meet Hazards Reduction and D&D lighting requirements

Department

Breakdown of Cost Data:

Item - Shutdown Building Lighting Study Units - 1) Hours 2) Dollars

Unit Cost - 1)1,488 2)29,124

Line Item A1DD07-1EMC019025 - Shutdown Building Lighting Study

Unit Cost Adjustment factor - None

Cost Element

Revised Unit Cost - N/A

Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

		Osi Etemeni		Skiii		Department	Curve	Quantity Units
750	STRAIGH1	TIME BASE	E020	CIVIL ENGINEERS	C104S	Closure Management	Linear	176.09 Hours
Factors	198	Hours						
				1		1	0.88934 [SYS 0614	001 .88934200 - Svstem
750	STRAIGH1	TIME BASE	E040	ELECTRICAL ENGINEERS	C104S	Closure Management	Linear	176.09 Hours
Factors	198	Hours - Electrical Engineeri	ng Supp	ort				
				T			0.88934 [SYS 0614	001 .88934200 - Svstem
750	STRAIGH1	TIME BASE	E070	MECHANICAL ENGINEERS	C104S	Closure Management	Linear	176.09 Hours
Factors	198	Hours						
				1		1	0.88934 [SYS 0614	001 .88934200 - Svstem
750	STRAIGHT			NUCLEAR (CRITICALITY) ENGINEER	C104S	Closure Management	Linear	176.09 Hours
Factors	198	Hours - Rad Engineering S	upport					
				1				001 .88934200 - Svstem
750			M010	FOREMEN / TEAM LEADS / GROUP	C104S	Closure Management	Linear	88.93 Hours
Factors	100	Hours - RCT Supervision						
	1		1	1				001 .88934200 - Svstem
750				MANAGERS (GRADE 69 - 72)	C104S	Closure Management	Linear	62.25 Hours
Factors	70	Hours - Group/Project Mana	agement					
								001 .88934200 - Svstem
750				INDUSTRIAL HYGIENISTS	C104S	Closure Management	Linear	176.09 Hours
Factors	198	Hours - Industrial Hygiene S	Support					
								001 .88934200 - Svstem
		TIME BASE		ENVIRONMENTAL SCIENTISTS	C104S	Closure Management	Linear	177.87 Hours
Factors	200	Hours - Environmental Com	npliance					
				T		1		001 .88934200 - Svstem
		RACTED SRVS	0000	NONE	C104S	Closure Management	Linear	9.096.46 Dollars
Factors	10000	Dollars		1.02283 FY00 Escalation				
				T		1		001 .88934200 - Svstem
A5H		RACTED SRVS		NONE	C104S	Closure Management	Linear	9.096.46 Dollars
Factors	10000	Dollars - SubC Study Suppo	ort	1.02283 FY00 Escalation				
	T			Ta		T		001 .88934200 - Svstem
		RACTED SRVS	T050	RADIATION CONTROL TECHNOLIGI	KE10H		Linear	8.299.46 Dollars
Factors	198	Hours - Rad Survevs		46.08 Dollars/Hr.		1.02283 FY00 Escalation		
							0.88934 [SYS 0614	001 .88934200 - System

Line Item A1DD08-1EMC019025 - Apply Contamination Cntrl Fixative

Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of BOE

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WBS No: 1EEC05 Activity ID: 1EEC5002

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter

1EEC

Activity Filter Starts In FY nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and

Baseline Devl

processes proprietary to B.865 deem historical costs unreliable as a basis for estimate.

Experience Item Desc - Application of contamination control fixative will be on-going for the purpose of preventing the mobilization of contamination throughout Hazards Reduction work activities.

Breakdown of Cost Data:

Item - Apply Contamination Control Fixative

Units - 1) Hours 2) Dollars Unit Cost - 1)1,695 2)33,724 Unit Cost Adjustment factor - None

Revised Unit Cost - N/A

Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es		Co.	st Element		Skill		Department	Curve	Ouantity Units
L	750	STRAIGHT	TIME BASE	E080	NUCLEAR (CRITICALITY) ENGINEER	C104S	Closure Management	Linear	177.87 Hours
F	actors	200	hours						
_		_				,		0.88934 [SYS 06140	01 .88934200 - Svstem
L	750	STRAIGHT	TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	C104S	Closure Management	Linear	209.00 Hours
F	actors	235	hours						
_		_				,		0.88934 [SYS 06140	01 .88934200 - Svstem
	750	STRAIGHT	TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	C104S	Closure Management	Linear	224.11 Hours
F	actors	252	hours						
						T		0.88934 [SYS 06140	01 .88934200 - Svstem
	750	STRAIGHT	TIME BASE	P090	INDUSTRIAL HYGIENISTS	C104S	Closure Management	Linear	224.11 Hours
F	actors	252	hours						
						T		0.88934 [SYS 06140	01 .88934200 - Svstem
	750	STRAIGHT	TIME BASE	S020	ENVIRONMENTAL SCIENTISTS	C104S	Closure Management	Linear	224.11 Hours
F	actors	252	hours						
_						1	T.	0.88934 [SYS 06140	01 .88934200 - Svstem
	750	STRAIGHT	TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KE10H	Indust/Site Srvs Steelworkers	Linear	448.23 Hours
F	actors	504	hours						
		1					T.	0.88934 [SYS 06140	01 .88934200 - Svstem
L	A5H	SUBCONTE	RACTED SRVS	0000	NONE	C104S	Closure Management	Linear	9.551.28 Dollars
F	actors	10500	Dollars - SubC SME and Ad	lmin Sppt	1.02283 FY00 Escalation				
		_				1	1	0.88934 [SYS 06140	01 .88934200 - Svstem
L	A5H	SUBCONTE	RACTED SRVS	T050	RADIATION CONTROL TECHNOLIGI	KE10H	Indust/Site Srvs Steelworkers	Linear	21.125.90 Dollars
F	actors	504	Hours		46.08 Dollars/Hr.		1.02283 FY00 Escalation		

Line Item A1DD09-1EMC019025 - Training & Qualification

BOE

Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate.

Experience Item Desc - Personnel performing Hazards Reduction, and eventually the D&D activities will require identified safety related training.

Breakdown of Cost Data:

Item - Training & Qualification Units - 1) Hours 2) Dollars Unit Cost - 1)1,368 2)22,810 Unit Cost Adjustment factor - None

Revised Unit Cost - N/A

Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Ouantity	Units

0.88934 [SYS 061400] .88934200 - System

WBS No: 1EEC05 Activity ID: 1EEC5002

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1EEC

					Baseline Cost an	iu Dasis	OI ESUI	illate	Activity Filter *		Starts In FY *
750	STRAIGH	T TIME BASE	C040	MAINTEN	NANCE MACHINIST (incl Exp	KE10H	Indust/S	ite Srvs Steelworkers		Linear	224.11 Hours
Factors	24	Classes required		3	Hours each		3.5	FTEs			
									0.88	34 ISYS	0614001 .88934200 - Svstem
750	STRAIGH	T TIME BASE	L060	MISSION	SUP SPEC II (FLTTCH. WS	KE10H	Indust/S	ite Srvs Steelworkers		Linear	192.10 Hours
Factors	3	Hours/Class		24	Classes		3	FTEs			
				1					0.88	34 [SYS	0614001 .88934200 - Svstem
750	STRAIGH	T TIME BASE	L060	MISSION	SUP SPEC II (FLTTCH. WS	KE10H	Indust/S	ite Srvs Steelworkers		Linear	48.02 Hours
Factors	3	Hours/Class		24	Classes		0.75	FTE			
				ı			1		0.88	34 [SYS	0614001 .88934200 - Svstem
750		T TIME BASE	M010		N / TEAM LEADS / GROUP	C104S		Management		Linear	352.18 Hours
Factors	5.5	FTEs		3	Hours/Class		24	Classes			
			1				1		0.88		0614001 .88934200 - Svstem
		T TIME BASE	P050		ANCE INSPECTORS	C104S		Management		Linear	32.02lHours
Factors	3	Hours/Class		24	Classes		0.5	FTEs			
				1			1		0.88		0614001 .88934200 - Svstem
	STRAIGH	T TIME BASE	P090		RIAL HYGIENISTS	C104S		Management		Linear	64.03lHours
Factors	1	FTE		3	Hours/Class		24	Classes			
			1	l					0.88		0614001 .88934200 - Svstem
750		T TIME BASE	I R070		REATMENT OPERATOR A	KE10H				Linear	192.10 Hours
Factors	3	Hours/Class		24	Classes		3	FTEs	0.00	204 101/0	004 4001 0000 4000 0
750	CTDAIGH	T TIME BASE	T060	D0 D 114-	REDUC TECH / RISK RED	KE10H	ll+/0	ite Srvs Steelworkers	0.88		0614001 .88934200 - Svstem 96.05 Hours
750	3	Hours/Class	1060	24	Classes	KETUH		FTEs		Linear	96.05 Hours
Factors	3	Hours/Class		24	Classes		1.5	FIES	0.00	2/21 10/0	0614001 .88934200 - System
750	CTDAICH	T TIME BASE	T400	Do D CO	NSTRUCTION TRADES (incl.	00000	Filtor Cu	voto m o	0.00	Linear	16.01 Hours
Factors	0.25	FTE	1 1100	3	Hours/class	C260S	24	Classes		Linear	16.01 Hours
raciors	0.25	116		3	i ioui 5/0id55		24	CIASSES	0.99)34 [6/6	061400] .88934200 - System
A5H	SLIBCON	TRACTED SRVS	T050	PADIATI	ON CONTROL TECHNOLIGI	KE10⊔	Indust/9	tita Style Staalworkers	0.00	Linear	20.748.65 Dollars
Factors	495	hours	1 1000	46.08	Dollars/Hr.	INE IUI		3 FY00 Escalation -	_	Lilleai	20,740.03jD0lld15
ruciors	430	ilouis		40.00	Donats/Til.		1.02203	i IOU LacaidliOII -		2751 1878	0614001 .88934200 - System
									0.00	1010	00 17001.00307200 - System

Line Item A1DD10-1EMC019025 - Required Surveillances

BOE

Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate.

Experience Item Desc - The phased shutdown of facility systems will necessitate the performance of safety related surveillances prior to the completion of Hazards Reduction tasks.

Breakdown of Cost Data:

Item - Required Facility Surveillances

Units - 1)Hours 2)Dollars Unit Cost - 1)3,475 2)133,092

Unit Cost Adjustment factor - None

Revised Unit Cost - N/A

Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s Co	ost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT	TIME BASE MO	M010 FOREMEN / TEAM LEADS / GROUP	C104S Closure Management	Linear	400.20	Hours
Factors 450	hours					
				0.88934 [SYS 06140	01 .88934200 - S	System
750 STRAIGHT	TIME BASE MO	M010 FOREMEN / TEAM LEADS / GROUP	C104S Closure Management	Linear	400.20	Hours
Factors 450	hours					
				0.88934 [SYS 06140	01 .88934200 - 9	System

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 WBS No:
 1EEC05
 Rocky Flats

 Activity ID:
 1EEC5002
 Receive Cost

Rocky Flats Closure Project
Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1EEC

	Baseline Cost and Basis of Estimate Activity Filter							Starts In FY *
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C104S	Closure Management		Linear	55.14 Hours
Factors	62 hours							
						0.889	34 [SYS 06140	01 .88934200 - Svstem
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers		Linear	2.134.42 Hours
Factors	2400 hours							
						0.889	34 [SYS 06140	001 .88934200 - Svstem
A5H	SUBCONTRACTED SRVS	0000	NONE	C104S	Closure Management		Linear	20.467.03 Dollars
Factors	22500 Dollars SubC SME and adr	nin sppt	1.02283 FY00 Escalation					
			_		_	0.889	34 [SYS 06140	001 .88934200 - Svstem
A5H	SUBCONTRACTED SRVS	T050	RADIATION CONTROL TECHNOLIGI	KE10H	Indust/Site Srvs Steelworkers		Linear	100.599.50 Dollars
Factors	46.08 Dollars/Hr.		2400 Hours		1.02283 FY00 Escalation			

Line Item A1DD11-1EMC019025 - Collect and Develop CDPH&E Data

0.88934 [SYS 061400] .88934200 - System

BOE

Estimators Experience - This estimate was developed by B.865/883 Facility Manager, with over 20 years experience with deactivation & decommissioning of nuclear facilities and nuclear regulatory agencies. Facility Manager also has additional five years experience at RFETS as the Environmental Compliance coordinator and Facility Manager. Analysis of previously performed similar activities by the estimator augments estimator's experience. Equipment and processes proprietary to B.865 deem historical costs unreliable as a basis for estimate.

Experience Item Desc - CDPH&E requires that specific information be gathered and developed for their analysis.

Breakdown of Cost Data:

Item - Collection & Development of CDPH&E Data
Units - 1)Hours 2)Dollars

Unit Cost - 1)792 2)4,200

Unit Cost Adjustment factor - None

Revised Unit Cost - N/A Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s	Cost Element	Skill	Department	Curve	Ouantity Units
750	STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEER	S C104S Closure Management	Linear	88.04 Hours
Facto	rs 99 hours				
				0.88934 [SYS 061	400] .88934200 - System
750	STRAIGHT TIME BASE	E120 SAFETY ENGINEERS	C104S Closure Management	Linear	88.04 Hours
Facto	rs 99 hours				
	T	T			4001 .88934200 - Svstem
750		M020 MANAGERS (GRADE 69 - 72)	C104S Closure Management	Linear	31.13lHours
Facto	rs 35 hours				
	T	T			4001 .88934200 - Svstem
750		M020 MANAGERS (GRADE 69 - 72)	C104S Closure Management	Linear	31.13lHours
Facto	rs 35 hours			0.00004 10000.004	400] 00004000 0 4
	07041011771450405	14000 1444405DQ (QDAD5 00 50)	0,010 0, 11		4001 .88934200 - Svstem
750		M020 MANAGERS (GRADE 69 - 72)	C104S Closure Management	Linear	88.04 Hours
Facto	rs 99 hours			0.00004 10000	4001 0000 4000 0 4
	070404774450405		0.000 01 11		4001 .88934200 - Svstem
750		P050 COMPLIANCE INSPECTORS	C104S Closure Management	Linear	88.04 Hours
Facto	rs 99 hours				
		T = T=			4001 .88934200 - Svstem
750		P090 INDUSTRIAL HYGIENISTS	C104S Closure Management	Linear	88.04 Hours
Facto	rs 99 hours				
	T	T			4001 .88934200 - Svstem
750		S020 ENVIRONMENTAL SCIENTIST	S C104S Closure Management	Linear	88.04lHours
Facto	rs 99 hours				
					4001 .88934200 - Svstem
A5H		0000 NONE	C104S Closure Management	Linear	3,820.51 Dollars
Facto	rs 4200 Dollars SubC SME and a	admin sppt 1.02283 FY00 Escalation			
				0.88934 [SYS 061 ₄	400] .88934200 - System

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WBS No: 1EEC05 Activity ID: 1EEC5002

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Activity Filter

Baseline Devl 1EEC

0.88934 [SYS 061400] .88934200 - System

Starts In FY *

Units

Line Item NPMCWM0100-1EMCWM901 - Strategy/Methodology

BOE

Line Title: Strategy/Methodology Primary Driver(s): The estimate is comprised of the following computations: Cost Center R3008 (Skill Code M030 Program Manager): Straight time: (10 hr)(36.12) = \$361.2Cost Center I0383 (Skill Code E080Nuclear Engineers): Straight time: (4 hr)(27.82) = \$111.28Cost Center I3168 (Skill Code P080 Health Physicists): Straight time: (4 hr)(25.72) = \$102.88Cost Center S3143 (Skill Code P090 Industrial Hygienists) Straight time: (4 hr)(26.49) = \$105.96Cost Center R0237 (Skill Code P170 Other Administrative and Professional Occupations): Straight time: (4 hr)(23.68) = \$94.72Cost Center I0379 (Skill Code P170 Other Administrative and Professional Occupations): Straight time: (4 hr)(23.68) = \$94.72Subcontract Services A5H Cost Center L3175 (Skill Code P170 Other Administrative and Professional Occupations): Straight time: (12 hr)(46) = \$552 Total Activity: \$1422.76 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

750 STRAIGHT TIME BASE	E080 NUCLEAR (CRITICALITY) ENGINEER	K249S Nuclear Safety & Licensing	Linear	3.56 Hours
Factors 4 Hours				
			0.88934 [SYS 061400	1 .88934200 - Svstem
750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C104S Closure Management	Linear	8.89 Hours
Factors 10 Hours				
			0.88934 [SYS 061400	1.88934200 - Svstem
750 STRAIGHT TIME BASE	P080 HEALTH PHYSICISTS	C101S Health & Safety	Linear	3.56 Hours
Factors 4 Hours				
		,	0.88934 [SYS 061400	1.88934200 - Svstem
750 STRAIGHT TIME BASE	P090 INDUSTRIAL HYGIENISTS	C104S Closure Management	Linear	3.56 Hours
Factors 4 Hours				
			0.88934 [SYS 061400	1.88934200 - Svstem
750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C242S Transportation	Linear	3.56 Hours
Factors 4 Hours				
			0.88934 [SYS 061400	1.88934200 - Svstem
750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C242S Transportation	Linear	3.56 Hours
Factors 4 Hours				
		,	0.88934 [SYS 061400	1.88934200 - Svstem
A5R MISC EXPENSES	0000 NONE	C104S Closure Management	Linear	498.28 Dollars
Factors 552 Dollars	1.015 FY00 Escalation			

Line Item NPMCWM0101-1EMCWM901 - Procurement

BOE

Line Title: Procurement Cost Center: L3195 The estimate is comprised of the following computations: A5C107 Air mover \$6000 A5C115 Scaffolding \$5000 A5C115 Miscellaneous \$2000 A5C115 Portable band saw \$1000

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WBS No: 1EEC05 **Rocky Flats Closure Project** Activity ID: 1EEC5002 **Baseline Cost and Basis of Estimate**

Baseline Devl Proiect WBS Filter 1EEC Activity Filter

Starts In FY *

Total Activity: \$14,000

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es	Cost Element	Skill	Department	Curve	<i>Quantity</i> U	Units
	A5C SUPPLIES	0000 NONE	C104S Closure Management	Linear	12.637.55 Do	llars

Factors 14000 Dollars 1.015 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - System

0.88934 [SYS 061400] .88934200 - System

Line Item NPMCWM0102-1EMCWM901 - Engineering Design Package

Line Title: Engineering Design Package BOE Primary Driver(s):

The estimate is comprised of the following computations:

Cost Center L3184 (Skill Code E130 Other Engineers):

Straight time: (240 hr)(30.03) = \$2402.40Cost Center I3051 (Skill Code E110 Quality Control Engineers):

Straight time: (8 hr)(26.49) = \$211.92

Cost Center L3184 (Skill Code P170 Other Professionals):

Straight time: (8 hr)(23.68) = \$189.44Cost Center I3168 (Skill Code P080 Health Physicist):

Straight time: (8 hr)(25.72) = \$205.76

Cost Center S3143 (Skill Code P090 Industrial Hygienist):

Straight time: (8 hr)(26.49) = \$211.92

Cost Center I0274 (Skill Code P170 Other Professionals): Straight time: (16 hr)(23.68) = \$378.88

Total Activity: \$3600.32

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es	Cost Element	Skill		Department	Curve	Ouantity Units
	50 STRAIGHT TIME BASE	E110 QUALITY CONTROL ENGINEERS	C102S	Quality Assurance	Linear	7.11 Hours
Fa	tors 8 Hours					
					0.88934 [SYS 061400	01 .88934200 - Svstem
	50 STRAIGHT TIME BASE	P050 COMPLIANCE INSPECTORS	C103S	Environmental Compliance	Linear	213.44 Hours
Fa	tors 240 Hours					
_					0.88934 [SYS 061400	01 .88934200 - Svstem
	50 STRAIGHT TIME BASE	P080 HEALTH PHYSICISTS	C101S	Health & Safetv	Linear	7.11 Hours
Fa	tors 8 Hours					
_					0.88934 [SYS 061400	01 .88934200 - Svstem
	50 STRAIGHT TIME BASE	P090 INDUSTRIAL HYGIENISTS	C104S	Closure Management	Linear	7.11 Hours
Fa	tors 8 Hours					
					0.88934 [SYS 061400	01 .88934200 - Svstem
	50 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C242S	Transportation	Linear	7.11 Hours
Fa	tors 8 Hours					
_					0.88934 [SYS 061400	0] .88934200 - System
1	50 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C242S	Transportation	Linear	14.23 Hours

Line Item NPMCWM0103-1EMCWM901 - Authorization Basis

Hours

Factors

BOE

Line Title: Authorization Basis Primary Driver(s): The estimate is comprised of the following computations: Cost Center I3051 (Skill Code E110 Quality Control Engineers): Straight time: (8 hr)(26.49) = \$211.92Cost Center L3184 (Skill Code P170 Other Professionals): Straight time: (16 hr)(23.68) = \$378.88 Cost Center I3168 (Skill Code P080 Health Physicist):

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WBS No: 1EEC05 **Rocky Flats Closure Project** 1EEC5002 Activity ID: **Baseline Cost and Basis of Estimate**

Baseline Devl Proiect 1EEC WBS Filter

Activity Filter Starts In FY * Straight time: (8 hr)(25.72) = \$205.76Cost Center S3143 (Skill Code P090 Industrial Hygienist): Straight time: (8 hr)(26.49) = \$211.92Cost Center I0379 (Skill Code P170 Other Professionals): Straight time: (8 hr)(23.68) = \$189.44 Cost Center I3081 (Skill Code E130 Other Engineers- SES/USQD): Straight time: (16 hr)(30.03) = \$480.48Cost Center S3172 (Skill Code E130 Other Engineers - ORC): Straight time: (32 hr)(30.03) = \$960.96Subcontract services: A5H Cost Center L3195 (Skill code P070 Planners/Schedulers): Straight time: (30 hours)(46) = \$1380 Total Activity: \$4019.36 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions. Cost Element Skill Curve **Quantity** Units

Department

Resources

Cost Etement	Skill	Department	Curve	Quantity Units
750 STRAIGHT TIME BASE	E130 OTHER ENGINEERS	C105S Work Control Center	Linear	14.23 Hours
Factors 16 Hours				
			0.88934 [SYS 06140	0] .88934200 - System
750 STRAIGHT TIME BASE	E130 OTHER ENGINEERS	C105S Work Control Center	Linear	14.23 Hours
Factors 16 Hours				
			0.88934 [SYS 06140	01 .88934200 - Svstem
750 STRAIGHT TIME BASE	E130 OTHER ENGINEERS	C105S Work Control Center	Linear	28.46 Hours
Factors 32 Hours				
			0.88934 [SYS 06140	01 .88934200 - Svstem
750 STRAIGHT TIME BASE	P080 HEALTH PHYSICISTS	C101S Health & Safety	Linear	7.11 Hours
Factors 8 Hours				
			0.88934 [SYS 06140	01 .88934200 - Svstem
750 STRAIGHT TIME BASE	P090 INDUSTRIAL HYGIENISTS	C103S Environmental Compliance	Linear	7.11 Hours
Factors 8 Hours				
			0.88934 [SYS 06140	01 .88934200 - Svstem
750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROP	FE C242S Transportation	Linear	7.11 Hours
Factors 8 Hours				
			0.88934 [SYS 06140	01 .88934200 - Svstem
A5H SUBCONTRACTED SRVS	0000 NONE	C104S Closure Management	Linear	1.255.31 Dollars
Factors 1380 Dollars	1.02283 FY00 Escalation			
			0.88934 [SYS 06140	01 .88934200 - Svstem
A5H SUBCONTRACTED SRVS	E110 QUALITY CONTROL ENGINEERS	C102S Quality Assurance	Linear	250.12 Dollars
Factors 274.96 Prime Dollars	1.02283 FY00 Escalation			

Line Item NPMCWM0104-1EMCWM901 - Stripout

BOE

Line Title: B865 Stripout Primary Driver(s): The estimate is comprised of the following computations: Cost Center I4264 (Skill Code C120 Exp Oper): Straight time: (80 hr)(19.32) = \$1545.60 Cost Center I4260 (Skill Code C080 Pipefitters): Straight time: (160 hr)(20.23) = \$3236.80Cost Center I4261 (Skill Code C120 RCT): Straight time: (80 hr)(19.32) = \$1545.60Cost Center I4260 (Skill Code C010 Carpenters): Straight time: (80 hr)(20.22) = \$1617.60 Total Activity: \$7945.60

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0.88934 [SYS 061400] .88934200 - System

 WBS No:
 1EEC05
 Rocky Flats Closure Project
 Project
 Baseline Devi

 Activity ID:
 1EEC5002
 Baseline Cost and Basis of Estimate
 WBS Filter
 1EEC

Activity Filter Starts In FY This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions. Resources Cost Element Department Curve **Ouantity** Units 750 STRAIGHT TIME BASE C010 CARPENTERS KE10H Indust/Site Srvs Steelworkers Linear 71.15 Hours 80 Factors Hours 0.88934 [SYS 061400] .88934200 - System 750 C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers STRAIGHT TIME BASE Linear 142.29 Hours **Factors** 160 Hours 0.88934 [SYS 061400] .88934200 - System 750 L070 MISSION SUP SPEC III KE10H Indust/Site Srvs Steelworkers 71.15 Hours STRAIGHT TIME BASE Linear Factors Hours 0.88934 [SYS 061400] .88934200 - System R010 CHEMICAL SYSTEMS OPERATOR (| KE10H | Indust/Site Srvs Steelworkers 750 STRAIGHT TIME BASE 71.15 Hours Factors 80 Hours 0.88934 [SYS 061400] .88934200 - System Line Item NPMCWM0105-1EMCWM901 - Clean Closure Operations Line Title: Clean Closure Operations BOE Primary Driver(s): The estimate is comprised of the following computations: Cost Center I4264 (Skill Code C120 Exp Oper): Straight time: (232 hr)(19.32) = \$4482.24 Cost Center I4260 (Skill Code C080 Pipefitters): Straight time: (80 hr)(20.23) = \$1618.40Cost Center I4261 (Skill Code C120 RCT): Straight time: (232 hr)(19.32) = \$4482.24 Cost Center I4260 (Skill Code C120 SOE): Straight time: (16 hr)(19.32) = \$309.12Contract Services: Cost Center I3027 (2 visits by Sample Team)(\$2000 per visit) = \$4,000 Cost Center I3027 Lab Analysis (8 samples)(\$1707 per sample) = \$13,656 Total Activity: \$28,548.00 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions. Cost Element Quantity Units Resources Department Curve 750 STRAIGHT TIME BASE C080 PLUMBERS AND PIPEFITTERS KE10H Indust/Site Srvs Steelworkers 71.15 Hours Linear Factors 80 Hours 0.88934 [SYS 061400] .88934200 - System C120 D&D SKILLED TRADES 206.33 Hours STRAIGHT TIME BASE KE10H Indust/Site Srvs Steelworkers Factors 232 Hours 0.88934 [SYS 061400] .88934200 - System C120 D&D SKILLED TRADES 750 STRAIGHT TIME BASE KE10H Indust/Site Srvs Steelworkers Linear 14.23 Hours Factors 16 Hours 0.88934 [SYS 061400] .88934200 - System T050 RADIATION CONTROL TECHNOLIGI | KE10H | Indust/Site Srvs Steelworkers 750 STRAIGHT TIME BASE Linear 206.33 Hours Factors Hours 0.88934 [SYS 061400] .88934200 - System C104S Closure Management 15.937.76 Dollars A5R MISC EXPENSES 0000 NONE 17656 Dollars 1.015 -- FY00 Escalation --0.88934 [SYS 061400] .88934200 - System Line Item NPMCWM0106-1EMCWM901 - Remove T-4 and T-5 Line Title: Remove T-4 and T-5 BOE Primary Driver(s): The estimate is comprised of the following computations:

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WBS No: 1EEC05 **Rocky Flats Closure Project** Activity ID: 1EEC5002 **Baseline Cost and Basis of Estimate** Proiect Baseline Devl WBS Filter 1EEC Activity Filter

Starts In FY

0.88934 [SYS 061400] .88934200 - System

Quantity Units

Cost Center I4261 (Skill Code C120 RCT): Straight time: (176 hr)(19.32) = \$3400.32 Cost Center I4264 (Skill Code C120 Exp Oper): Straight time: (352 hr)(19.32) = \$6800.64Cost Center I4260 (Skill Code C080 Pipefitters): Straight time: (208 hr)(20.23) = \$4207.84Cost Center I4260 (Skill Code C020 Electricians): Straight time: (32 hr)(20.62) = \$659.84 Cost Center R0237 (Skill Code P170 Other Professionals): Straight time: (16 hr)(23.68) = \$378.88

Total Activity: \$15,447.52

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es _		Cost Element		Skill		Department	Curve	Ouantity Units
	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	28.46 Hours
F_{ϵ}	actors	32 Hours						
_							0.88934 [SYS 06140	01 .88934200 - Svstem
	750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	184.98 Hours
F_{ϵ}	actors	208 Hours						
							0.88934 [SYS 06140	01 .88934200 - Svstem
	750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KE10H	Indust/Site Srvs Steelworkers	Linear	313.05 Hours
F_{ϵ}	actors	352 Hours						
							0.88934 ISYS 06140	01 .88934200 - Svstem
	750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KE10H	Indust/Site Srvs Steelworkers	Linear	156.52 Hours
F_{ϵ}	actors	176 Hours						
							0.88934 [SYS 06140	01 .88934200 - Svstem
	750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C242S	Transportation	Linear	14.23 Hours

Hours

BOE

Line Item NPMCWM0107-1EMCWM901 - Close Secondary Containment Line Title: Close Secondary Containment Primary Driver(s): The estimate is comprised of the following computations: Cost Center I4264 (Skill Code C120 Exp Oper): Straight time: (48 hr)(19.32) = \$927.36Cost Center I4261 (Skill Code C120 RCT): Straight time: (24 hr)(19.32) = \$463.68 Contract Services: Cost Center I3027 (1 visit by Sample Team)(\$2000 per visit) = \$2,000 Cost Center I3027 Lab Analysis (1 sample)(\$1707 per sample) = \$1707

Total Activity: \$5098.04

Cost Element

Factors 16

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Skill

Resources

750 STRAIGHT TIME BASE	C120 D&D SKILLED TRADES	KE10H Indust/Site Srvs Steelworkers	Linear	42.69 Hours
Factors 48 Hours				
			0.88934 [SYS 06140	01 .88934200 - Svstem
750 STRAIGHT TIME BASE	C120 D&D SKILLED TRADES	KE10H Indust/Site Srvs Steelworkers	Linear	21.34 Hours
Factors 24 Hours				
			0.88934 ISYS 06140	01 .88934200 - Svstem
A5R MISC EXPENSES	0000 NONE	C104S Closure Management	Linear	3.346.24 Dollars
Factors 3707 Dollars	1.015 FY00 Escalation			
			0.88934 [SYS 06140	01 .88934200 - System

Department

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Curve

WBS No: 1EEC05 Activity ID: 1EEC5002

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Baseline Devl Proiect WBS Filter 1EEC Activity Filter

Starts In FY *

0.88934 [SYS 061400] .88934200 - System

0.88934 [SYS 061400] .88934200 - System

Line Item NPMCWM0108-1EMCWM901 - Closure Certification

Line Title: Closure Certification

BOE

Primary Driver(s): The estimate is comprised of the following computations:

Cost Center R3008 (Skill Code M030 Program Manager):

Straight time: (40 hr)(36.12) = \$1444.80

Contracted Services: A5H410 Closure Certification \$10,000

Total Activity: \$11,444.80

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resource

ces	Cost Element				Skill		Department	Curve	Ouantity Units
	750	STRAIGH	T TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C104S	Closure Management	Linear	35.57 Hours
	Factors	40	Hours						
								0.88934 [SYS 06140	01 88934200 - System

A5H	SUBCONTRACTED SRVS	0000	NONE	C104S	Closure Management	Linear	9.096.46 Dollars

10000 Dollars 1.02283 -- FY00 Escalation --Factors

Line Item NPMCWM0109-1EMCWM901 - Final Building Operations

BOE

Line Title: Final Building Operations Primary Driver(s): The estimate is comprised of the following computations:

Cost Center I4264 (Skill Code C120 Exp Oper): Straight time: (48)(19.32) = 927.36Cost Center I4261 (Skill Code C120 RCT): Straight time: (24 hr)(19.32) = \$463.68

Total Activity: \$1391.04

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es		Cost Element		Skill		Department	Curve	Quantity	Units
	750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KE10H	Indust/Site Srvs Steelworkers	Linear	42.69	Hours
	Factors	48 Hours							
							0.88934 [SYS 06140	0] .88934200 - S	System
	750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KE10H	Indust/Site Srvs Steelworkers	Linear	21.34	Hours
	Factors	24 Hours							

Line Item NPMCWM0110-1EMCWM901 - Engineering Documentation

BOE

```
Line Title: Engineering Documentation
Primary Driver(s):
The estimate is comprised of the following computations:
Cost Center I0274 (Skill Code E130 Other Engineer):
Straight time: (16)(30.03) = 480.48
Total Activity: $480.48
Subcontract services: A5H
Cost Center L3195 (Skill Code M030 Project Manager):
Straight time: (1,680 \text{ hr})(46) = $77,280
Total Activity: $144,917.92
This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.
```

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WBS No: 1EEC05 Baseline Devl Proiect Rocky Flats Closure Project 1EEC Activity ID: 1EEC5002 WBS Filter **Baseline Cost and Basis of Estimate** Activity Filter Starts In FY Skill Units Resources Cost Element Department Curve E130 OTHER ENGINEERS 750 STRAIGHT TIME BASE C105S Work Control Center Linear 14.23 Hours Factors 16 Hours 0.88934 [SYS 061400] .88934200 - System A5H SUBCONTRACTED SRVS 0000 NONE C104S Closure Management Linear 70 297 42 Dollars 1.02283 -- FY00 Escalation --Factors 77280 Dollars 0.88934 [SYS 061400] .88934200 - System Line Item SYS - Contingency And Escalation BOE Resources Cost Element Skill Curve **Ouantity** Units Department CON CONTINGENCY 0000 NONE ZDEPT No Department 784.368.40 Dollars Linear 784368 Dollars Factors ESC ESCALATION ZDEPT No Department 351.530.70 Dollars 0000 NONE Linear 351531 Dollars WBS No: 1EEC08 800 Facilities Cluster Stab/Hazard Remov Title: Activity ID: 1EEC8001 Description: 800 Fac. Cluster Stab/Hazards Removal FY01 Cost Risk 2 Schedule Risk 2 Contingency Total Prime Line Item Description **Ouantity** BOELabor Labor Hours Labor Cost Materials/ Sub Burden Cost Total Cost Type Hours/Unit **Total Total** Cost & Escalation Cost EE 0001-1E5G103A3 Personnel Relocation 75.00 each 600 7.480 15.886 23.366 3.483 26.848 0100 Facility Transition 1.00 each EE 5.710 5.710 190.812 40.934 0 231.746 88.840 320.586 FF 0100-1E5G103A2 Property Removal 1.00 each 6.471 6.471 238.834 0 0 238.834 111.199 350.033 FF Contingency And Escalation SYS 1.00 ea 0 0 0 41.154 41.154 0 41.154 Total for Activity 1EEC8001: 12.781 437.126 56.820 535.099 203.522 738.622 41.154 Line Item 0001-1E5G103A30 - Personnel Relocation Breakdown of Cost Data: Cost estimate is derived from Relocation requirements Planning Template, Dated 3/31/99. BOE Ttem - Personnel Move Units - Each Unit Cost - \$432.35 Unit Cost Adjustment factor - None Revised Unit Cost - None Basis for adjustment - None This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions. Resources Cost Element Curve Units 750 STRAIGHT TIME BASE L090 GENERAL LABORER C233S Building Services Linear 8.00 Hours **Factors** 9 Hrs 0.88934 [SYS 061400] .88934200 - System A59 DYNCORP I&ET 0000 NONE C210S Facilities Mgmt & Maintenance 163.74 Dollars Linear **Factors Dollars** 1.02283 -- FY00 Escalation --A5C SUPPLIES C233S Building Services 48.08 Dollars 0000 NONE Linear Factors 53.26 Dollars 1.015 -- FY00 Escalation --0.88934 [SYS 061400] .88934200 - System Line Item 0100 - Facility Transition Estimators Experience - The estimators were consultants hired from ICF Kaiser to develop the facility transition tasks template the template was modified to BOE exclude relocation of personnel and property disposition. The remaining costs are applied on a per building basis in each cluster. Breakdown of Cost Data: Item - Building Transition Units - Per Building, 15 buildings in this cluster. Unit Cost - Maintenance Management - 160 Hrs; Carpenters - 74 hrs; Plumbers 74hrs; Electricians - 88 hrs; Env. Compliance - 8; Fire Prot. Eng. - \$1,200; Planning - \$1,800; Safety - 8 hrs. Unit Cost Adjustment factor - None Revised Unit Cost - None Basis for adjustment - None

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WBS No: 1EEC08 1EEC8001 Activity ID:

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect

Baseline Devl

WBS Filter Activity Filte 1EEC *

irces		~	ant Elamont			CL:11	D an auton aut	Commo	Occupation Train				
L	750 S1		ost Element TIME BASE	0040	CARPEN	Skill	C210S Facilities Mgmt & Maintenance	Curve Linear	Ouantity Units 987.17 Hours				
		74	hrs	I C010	15	buildings	CZ105 Facilities iviumt & Maintenance	Linear	90/.1/IMOURS				
						- and in qu		0.88934 [SYS 06140	001 .88934200 - System				
	750 S1	TRAIGHT	TIME BASE	C020	ELECTR	ICIANS	C210S Facilities Momt & Maintenance	Linear	1.173.93 Hours				
	Factors	88	hrs		15	buildings							
Г	750 SI	TD A IOL IT	TIME DAGE	C080	DLLIME	RS AND PIPEFITTERS	COACC Filiti Marrat & Mainter		007 47 Usern				
L		TRAIGHT 74	TIME BASE hrs	I C080	IPLUMBE 15	buildings	C210S Facilities Momt & Maintenance	Linear	987.17 Hours				
	r actors	/ 4	1113		13	Bullullug		0.88934 ISYS 06140	001 .88934200 - Svstem				
ſ	750 S1	TRAIGHT	TIME BASE	E050	ENVIRO	NMENTAL ENGINEERS	C103S Environmental Compliance	Linear	106.72 Hours				
		8	hrs		15 buildings								
	T				T			0.88934 [SYS 06140	001 .88934200 - Svstem				
L			TIME BASE	E120		ENGINEERS	C200S Engineering Services	Linear	106.72 Hours				
	Factors	8	hrs		15	buildings							
Г	750 0-	ED 4101 :=	TIME DAGE	0015	A DA 411 // -	NTD A TIV /E A OC 10 T A A 1 T C	00400 5 333 14 10 14 1		001 .88934200 - Svstem				
L		TRAIGHT 16	TIME BASE	I G010	IADMINIS 15	STRATIVE ASSISTANTS buildings	C210S Facilities Mgmt & Maintenance	Linear	213.44 Hours				
	Factors	10	IIIS		15	buildings		0.88934 [676.06140	001 .88934200 - Svstem				
ſ	750 S1	TRAIGHT	TIME BASE	M020	MANAG	ERS (GRADE 69 - 72)	C210S Facilities Mgmt & Maintenance	U.80934 1313 06140	2.134.42 Hours				
		160	hrs	1 181020	15	buildings	The transfer of the transfer o	Linken	2.107.7211.0013				
_					-			0.88934 [SYS 06140	001 .88934200 - Svstem				
Ĺ	A53 E-			0000	NONE		C105S Work Control Center	Linear	24.560.43 Dollars				
	Factors	1800	\$		15	buildings	1.02283 FY00 Escalation						
Г	I.				l .				001 .88934200 - Svstem				
L	A53 E-	_	•	0000	-	1 7 2	K252S Engineering	Linear	16.373.62 Dollars				
	Factors	1200	Factors 1200 \$ 15 buildings 1.02283 FY00 Escalation										
	0.88934 [SYS 061400] .88934200 - System 100-1E5G103A20 - Property Removal												
				or has been	workin	, in KH property mana	gement and overgight for the next four		001 .88934200 - System				
	Estimato Experien a dispo Breakdow Item - Units - Unit Co transpor Unit Co Revised	rs Expe ce Item sal cos n of Co propert each. st - Av tation, st Adju	rrience - Estimator Desc - Estimator the model that was st Data: y disposition There are and es	has been madapted to stimated 970 ac unit of a al handling	nanaging the bu	g the subcontractor e ildings in this clust s that will require d	isposition. uires .20 hrs of Haz. Assessment, .35	years. disposition for four ye	ears. Estimator dev				
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rces [Estimato Experien a dispo Breakdow Item - Units - Unit Co transpor Unit Co Revised Basis f This est	rs Expect ce Item sal cos sal cos on of Copropert each. st - Avtation, st Adju Unit Cor adju imate i	rience - Estimator n Desc - Estimator to model that was set Data: ty disposition There are and es erage cost for or n.1 Hrs of materi ustment factor - N cost - None ustment - None n.ncludes a project	timated 970 te unit of a al handling	nanaging the bu	the subcontractor edildings in this clust sthat will require deproperty disposal required as her admin support siciency factor for constitutions.	fforts in excess property and property er isposition. uires .20 hrs of Haz. Assessment, .35 . mmitted but as yet undefined cost redu	ryears. r disposition for four years. hrs of Readiness removal actions. Curve Linear	ears. Estimator dev ., .2 Hrs of Ouantity Units 459.79 Hours				
rces [Estimato Experien a dispo Breakdow Item - Units - Unit Co transpor Unit Co Revised Basis f This est 750 ST Factors	rs Expece Items sal cos n of Coopropert each. st - Av tation, st Adju Unit Coor adju imate i	rience - Estimator Desc - Estimator Desc - Estimator St model that was set Data: Dy disposition There are and es Gerage cost for or Thrs of materi Destment factor - None Destment - None Descriptions Descriptions Destment Destment TIME BASE	chas been madapted to stimated 970 te unit of a al handling lone color c	nanaging the bu	g the subcontractor editions in this clust sthat will require doproperty disposal requires and the support of the subcontractor for constant support still support still support suppo	isposition. uires .20 hrs of Haz. Assessment, .35 mmitted but as yet undefined cost redu Department KE10H Indust/Site Srvs Steelworkers	ryears. r disposition for four years. hrs of Readiness removal actions. Curve Linear	ears. Estimator dev				
rces [Estimato Experien a dispo Breakdow Item - Units - Unit Co transpor Unit Co Revised Basis f This est 750 ST Factors	rs Expece Items sal cos n of Coopropert each. st - Av tation, st Adju Unit Coor adju imate i	rience - Estimator Desc - Estimator St model that was St Data: Sy disposition There are and es Gerage cost for or One of the strength of the s	chas been madapted to stimated 970 te unit of a al handling lone color c	managing the built of the built	g the subcontractor editions in this clust sthat will require doproperty disposal requires and the support of the subcontractor for constant support still support still support suppo	fforts in excess property and property er isposition. uires .20 hrs of Haz. Assessment, .35 . mmitted but as yet undefined cost redu	hrs of Readiness removal Curve Linear 0.88934 [SYS 06140]	Ouantity Units 459.79 Hours 001.88934200 - System 517.60 Hours				
rces [Estimato Experien a dispo Breakdow Item - Units - Unit Co Revised Basis f This est 750 ST Factors Factors	rs Expece Item sal cos n of Coopropert each. st - Av tation, st Adju Unit Cor adju imate i	rrience - Estimator Desc - Estimator St model that was St Data: Sy disposition There are and es Gerage cost for or In the stand of the standard of the standar	chas been madapted to stimated 970 see unit of a sal handling sone C010	managing the bu	g the subcontractor editions in this clust sthat will require doproperty disposal requires and the support of the subcontractor for constant support still support still support suppo	isposition. uires .20 hrs of Haz. Assessment, .35 mmitted but as yet undefined cost redu Department KE10H Indust/Site Srvs Steelworkers	hrs of Readiness removal Curve Linear 0.88934 [SYS 06140]	Ouantity Units 459.79 Hours				

Page 106 of 114 6/23/00 10:42:04 AM OFFICIAL USE ONLY WBS No: 1EEC08 Baseline Devl Proiect **Rocky Flats Closure Project** 1EEC8001 1EEC Activity ID: WBS Filter **Baseline Cost and Basis of Estimate** Activity Filter Starts In FY 750 STRAIGHT TIME BASE E120 SAFETY ENGINEERS C101S Health & Safety Linear 862.66 Hours Factors 970 hrs 0.88934 [SYS 061400] .88934200 - System 750 STRAIGHT TIME BASE L090 GENERAL LABORER KE10H Indust/Site Srvs Steelworkers 862.66 Hours Linear 970 Factors hrs 0.88934 [SYS 061400] .88934200 - System 750 STRAIGHT TIME BASE M020 MANAGERS (GRADE 69 - 72) C210S Facilities Mgmt & Maintenance 3.020.21 Hours Factors 3396 hrs 0.88934 [SYS 061400] .88934200 - System Line Item SYS - Contingency And Escalation BOE Resources Cost Element Skill Department Curve **Ouantity** Units CON CONTINGENCY 0000 NONE ZDEPT No Department Linear 24.954.76 Dollars Factors 24954.8 Dollars ESC ESCALATION 0000 NONE ZDEPT No Department 16.199.13 Dollars Linear 16199.1 Dollars Activity ID: 1EEC8002 Description: 800 Facility Cluster Stab/Hazards Removal FY02 Cost Risk 2 Schedule Risk Line Item Description **Ouantity** Units BOELabor Labor Hours Labor Cost Materials/ Sub Contingency Total Prime Burden Cost Total Cost Type Hours/Unit Total & Escalation Total Cost 0001-1E5F104A3 Personnel Relocation 35.00 each EE 280 3.491 7.413 10.904 1.228 12.132 EE 0001-1E6G104A3 Personnel Relocation 1.00 each 8 8 100 212 0 312 35 347 EE 3.806 27.289 44.735 0100 Facility Transition 1.00 each 3.806 127.208 0 154.497 199.233 0100-1E5F104A2 Property Removal 1.00 each EE 4.703 4.703 173.574 0 0 173.574 61.041 234.615 EE 1.615 1.615 59.621 59.621 20.967 80.588 0100-1E6G104A2 Property Removal 1.00 each 0 0 Contingency And Escalation 1.00 ea FF 0 0 0 0 87.929 87.929 0 87.929 Total for Activity 1EEC8002: 10.412 363.993 34.915 87.929 486.837 128.006 614.843 Line Item 0001-1E5F104A30 - Personnel Relocation Estimators Experience -BOE Experience Item Desc -Breakdown of Cost Data: Item - Personnel Move Units - Each Unit Cost - \$432.35 Unit Cost Adjustment factor - None Revised Unit Cost - None Basis for adjustment - None This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions. Resources Cost Element Department Curve Units 750 STRAIGHT TIME BASE L090 GENERAL LABORER C233S Building Services Linear 8.00 Hours Factors 0.88934 [SYS 061400] .88934200 - System DYNCORP I&ET 0000 NONE C210S Facilities Mgmt & Maintenance 163.74 Dollars Factors 180 Dollars 1.02283 -- FY00 Escalation --0.88934 [SYS 061400] .88934200 - System A5C SUPPLIES 0000 NONE C233S Building Services 48.08 Dollars Linear Factors 53.26 Dollars 1.015 -- FY00 Escalation --0.88934 [SYS 061400] .88934200 - System

WBS No: 1EEC08
Activity ID: 1EEC8002

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter 1EEC Activity Filter *

Starts In FY *

0.88934 [SYS 061400] .88934200 - System

0.88934 [SYS 061400] .88934200 - System

Line Item 0001-1E6G104A30 - Personnel Relocation

BOE

Estimators Experience -

Experience Item Desc -

Breakdown of Cost Data:
Item - Personnel Move
Units - Each
Unit Cost - \$432.35
Unit Cost Adjustment factor - None
Revised Unit Cost - None
Basis for adjustment - None

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

ces		Cost Element		Skill		Department	Curve	Quantity	Units
ļ	750	STRAIGHT TIME BASE	L090	GENERAL LABORER	C233S	Building Services	Linear	8.00	Hours

Factors 9 Hrs

					0.88934 ISYS 06140	01 .88934200 - Svstem
A59	DYNCORP I&ET	0000 NONE	C210S	Facilities Momt & Maintenance	Linear	163.74 Dollars
Factors	180 Dollars	1.02283 F	Y00 Escalation		·	

A5C SUPPLIES 0000 NONE C233S Building Services Linear 48.08 Dollars

Factors 53.26 Dollars 1.015 -- FY00 Escalation --

Line Item 0100 - Facility Transition

BOE

Estimators Experience - The estimators were consultants hired from ICF Kaiser to develop the facility transition tasks template the template was modified to exclude relocation of personnel and property disposition. The remaining costs are applied on a per building basis in each cluster.

Breakdown of Cost Data:

Item - Building Transition

Units - Per Building, 10 buildings in this cluster.

Unit Cost - Maintenance Management - 160 Hrs; Carpenters - 74 hrs; Plumbers 74hrs; Electricians - 88 hrs; Env. Compliance - 8; Fire Prot. Eng. - \$1,200;

Planning - \$1,800; Safety - 8 hrs. Unit Cost Adjustment factor - None

Unit Cost Adjustment lactor - None

Revised Unit Cost - None Basis for adjustment - None

Basis for adjustment - None

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s	Cost Element			Skill		Department	Curve	Ouantity Units
750	STRAIGHT TIME BASE	C010	CARPEN	TERS	C210S	Facilities Momt & Maintenance	Linear	658.11 Hours
Factors	74 hrs		10	buildinas				
		ı	1		Ī		0.88934 [SYS 06140	01 .88934200 - Svstem
750	STRAIGHT TIME BASE	C020	ELECTRI	CIANS	C210S	Facilities Mamt & Maintenance	Linear	782.62 Hours
Factors	88 hrs		10	buildings				
		ı	1		Ī		0.88934 [SYS 06140	01 .88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBE	RS AND PIPEFITTERS	C210S	Facilities Mamt & Maintenance	Linear	658.11 Hours
Factors	74 hrs		10	buildings				
		ı	1		Ī		0.88934 [SYS 06140	01 .88934200 - Svstem
750	STRAIGHT TIME BASE	E050	ENVIRO	MENTAL ENGINEERS	C103S	Environmental Compliance	Linear	71.15 Hours
Factors	8 hrs		10	buildings				
	T	,			,		0.88934 [SYS 06140	01 .88934200 - Svstem
750	STRAIGHT TIME BASE	E120	SAFETY	ENGINEERS	C200S	Engineering Services	Linear	71.15 Hours
Factors	8 hrs		10	buildings				

WBS No: 1EEC08
Activity ID: 1EEC8002
Rocky Flats Closure Project
Recycling Cost and Resign of Estimate

Proiect Baseline Devl WBS Filter 1EEC

	Baseline Cost	and Basis of Estimate Activity File	ter *	Starts In FY *
750 STRAIGHT TIME BASE	G010 ADMINISTRATIVE ASSISTANTS	C210S Facilities Mgmt & Maintenance	Linear	142.29 Hours
Factors 16 hrs	10 buildings			
			0.88934 [SYS 06140	01 .88934200 - Svstem
750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C210S Facilities Mgmt & Maintenance	Linear	1.422.95 Hours
Factors 160 hrs	10 buildings			
			0.88934 [SYS 06140	01 .88934200 - Svstem
A53 E-2	0000 NONE	C105S Work Control Center	Linear	16.373.62 Dollars
Factors 1800 \$	10 buildings	1.02283 FY00 Escalation		
			0.88934 [SYS 06140	01 .88934200 - Svstem
A53 E-2	0000 NONE	K252S Engineering	Linear	10.915.75 Dollars
Factors 1200 \$	10 buildings	1.02283 FY00 Escalation		
			0.88934 [SYS 06140	01 .88934200 - Svstem

Line Item 0100-1E5F104A20 - Property Removal

BOE

Estimators Experience - Estimator has been working in KH property management and oversight for the past four years.

Experience Item Desc - Estimator has been managing the subcontractor efforts in excess property and property disposition for four years. Estimator developed a disposal cost model that was adapted to the buildings in this cluster

Breakdown of Cost Data:

Item - property disposition

Units - each. There are and estimated 7053 units that will require disposition.

Unit Cost - Average cost for one unit of admin. property disposal requires .20 hrs of Haz. Assessment, .35 hrs of Readiness removal, .2 Hrs of

transportation, .1 Hrs of material handling, and .35 hrs admin support.

Unit Cost Adjustment factor - None

Revised Unit Cost - None Basis for adjustment - None

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

s	Cost Element Skill		Skill		Department	Curve	Quantity Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	C211S	Electrical Maintenance	Linear	334.39 Hours
Factors	376 hrs						
						0.88934 [SYS 0614	001 .88934200 - Svstem
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	C214S	Building Maintenance	Linear	376.19 Hours
Factors	423 hrs						
						0.88934 [SYS 0614	001 88934200 - System
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	C213S	HVAC Maintenance	Linear	543.39 Hours
Factors	611 hrs						
						0.88934 [SYS 0614	001 .88934200 - Svstem
750	STRAIGHT TIME BASE	E120	SAFETY ENGINEERS	C101S	Health & Safetv	Linear	626.99 Hours
Factors	705 hrs						
						0.88934 [SYS 0614	001 .88934200 - Svstem
750	STRAIGHT TIME BASE	L090	GENERAL LABORER	C270S	Property Management	Linear	626.99 Hours
Factors	705 hrs						
_						0.88934 [SYS 0614	001 .88934200 - Svstem
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C210S	Facilities Mamt & Maintenance	Linear	2.194.90 Hours
Factors	2468 hrs						

Line Item 0100-1E6G104A20 - Property Removal

0.88934 [SYS 061400] .88934200 - System

BOE

Estimators Experience - Estimator has been working in KH property management and oversight for the past four years.

Experience Item Desc - Estimator has been managing the subcontractor efforts in excess property and property disposition for four years. Estimator developed a disposal cost model that was adapted to the buildings in this cluster

Breakdown of Cost Data:

Item - property disposition

Units - each. There are and estimated 2424 units that will require disposition.

Unit Cost - Average cost for one unit of admin. property disposal requires .10 hrs of Haz. Assessment, .2 hrs of Readiness removal, .1 Hrs of material handling, and .35 hrs admin support.

Unit Cost Adjustment factor - None

Revised Unit Cost - None

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WBS No: 1EEC08 1EEC8002 Activity ID:

Rocky Flats Closure Project Baseline Cost and Basis of Estimate Proiect WBS Filter Activity Filter Baseline Devl 1EEC

Basis for adjustment - None

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

M020 MANAGERS (GRADE 69 - 72)

Resources

es		Cost Element		<u>Skill</u>		<u>Department</u>	Curve	Quantity Units
	750	STRAIGHT TIME BASE	C010	CARPENTERS	C211S	Electrical Maintenance	Linear	114.73 Hours
	Factors	129 hrs						
							0.88934 [SYS 0614	001 .88934200 - Svstem
Į	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	C214S	Building Maintenance	Linear	128.95 Hours
	Factors	145 hrs						
							0.88934 [SYS 0614	001 .88934200 - Svstem
Į	750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	C213S	HVAC Maintenance	Linear	186.76 Hours
	Factors	210 hrs						
i.				_			0.88934 [SYS 0614	001 .88934200 - Svstem
	750	STRAIGHT TIME BASE	E120	SAFETY ENGINEERS	C101S	Health & Safetv	Linear	215.22 Hours
	Factors	242 hrs						
							0.88934 [SYS 0614	001 .88934200 - Svstem
	750	STRAIGHT TIME BASE	L090	GENERAL LABORER	C270S	Property Management	Linear	215.22 Hours
	Factors	242 hrs						

C210S Facilities Mgmt & Maintenance

Factors 848 hrs

750 STRAIGHT TIME BASE

0.88934 [SYS 061400] .88934200 - System

0.88934 [SYS 061400] .88934200 - System

Linear

754.16 Hours

Line Item SYS - Contingency And Escalation

BOE

Resources

es	Cost Element		Skill		Department		Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	60.322.70	Dollars
	Factors	60322.7 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	27.606.15	Dollars

Factors 27606.2 Dollars

Activity ID: 1EEC	Description: 800 Fac. Cluster Stab/Hazar	ds Remova	al FY03					Cost Risk	2 Schedule R	Pisk 2		
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
0100	Facility Transition	1.00	each	EE	381	381	12.721	2.729	0	15.450	4.401	19.851
0100 - tC55F104A	Property Removal	1.00	each	EE	4.703	4.703	173.574	0	0	173.574	60.057	233.631
881SPTAPEN	Planning & Engineering	1.00	each	EE	0	0	0	8.124	0	8.124	0	8.124
881SPTBCHR	Characterization	1.00	each	EE	0	0	0	27.297	0	27.297	0	27.297
881SPTCSPR	Site Preparation	1.00	each	EE	0	0	0	5.849	0	5.849	0	5.849
881SPTDPYA	Physical Activities	1.00	each	EE	0	0	0	109.838	0	109.838	0	109.838
881SPTEPMG	Proiect Management	1.00	each	EE	0	0	0	23.398	0	23.398	0	23.398
881SPTFSUS	Support Services	1.00	each	EE	0	0	0	21.448	0	21.448	0	21.448
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	125.852	125.852	0	125.852
	Tot	al for Activi	ty 1EEC800	3:		5.083	186.295	198.683	125.852	510.830	64.458	575.288

Line Item 0100 - Facility Transition

BOE

Estimators Experience - The estimators were consultants hired from ICF Kaiser to develop the facility transition tasks template the template was modified to exclude relocation of personnel and property disposition. The remaining costs are applied on a per building basis in each cluster. Breakdown of Cost Data:

Item - Building Transition

Units - Per Building, 1 buildings in this cluster.

Unit Cost - Maintenance Management - 160 Hrs; Carpenters - 74 hrs; Plumbers 74hrs; Electricians - 88 hrs; Env. Compliance - 8; Fire Prot. Eng. - \$1,200;

Planning - \$1,800; Safety - 8 hrs. Unit Cost Adjustment factor - None

Revised Unit Cost - None

Basis for adjustment - None

Page 110 of 114 6/23/00 10:42:06 AM OFFICIAL USE ONLY WBS No: 1EEC08 Activity ID: 1EEC8003

Rocky Flats Closure Project

Proiect WBS Filter Baseline Devl

1EEC

Activity ID:	1EEC8	8003				Baseline Cost an	d Basis	of Estimate	WBS Filter	1EEC			
	Thic	atimata	includes a project pro	duatin	tw/offi				Activity Filter	*	Starts In FY	*	
	IIIIS C	SCIMALE	includes a project pro	ductiv.	LCY/EIII	erency ractor for comm	iiccea r	out as yet underfined c	ost reductio	ль.			1
Resources			Cost Element		1	Skill		Department		Curve	Ouantity	Units	
	750		T TIME BASE	C010	CARPEN [®]		C210S	Facilities Mamt & Maintenan	ice	Linear	65.81	Hours	J
	Factors	74	hrs		1	buildings						_	
		07041011	T TU 15 5 4 6 5	0000	E. E.E.	21112	00400			0.88934 [SYS 06140			1
	750	ISTRAIGH 88	T TIME BASE	C020	ELECTRI 1	DIANS buildings	C210S	Facilities Momt & Maintenan	ice	Linear	78.26	Hours	I
	Factors	00	hrs		1	buildings				0.88934 [SYS 06140	01 88034300	Systom	
	750	STRAIGH	T TIME BASE	C080	DLLIMBE	RS AND PIPEFITTERS	C210S	Facilities Momt & Maintenan	100	U.86934 1313 06140		Hours	1
	Factors	74	hrs	0000	1	buildings	02100	T delities want & Waintenan	100	Lilloai	00.01	ilouis	į.
	1 401075	• •	5		•	2 4.1.4.1.40				0.88934 [SYS 06140	01 .88934200 - 3	System	
	750	STRAIGH	T TIME BASE	E050	ENVIRON	IMENTAL ENGINEERS	C103S	Environmental Compliance		Linear		Hours	
	Factors	8	hrs		1	buildings							
		T			1		I			0.88934 [SYS 06140	01 .88934200 - 3	Svstem	7
	750	STRAIGH	T TIME BASE	E120	SAFETY	ENGINEERS	C200S	Engineering Services		Linear	7.11	Hours]
	Factors	8	hrs		1	buildings							
		I			I					0.88934 [SYS 06140			1
	750		T TIME BASE	G010		TRATIVE ASSISTANTS	C210S	Facilities Mamt & Maintenan	ice	Linear	14.23	Hours	1
	Factors	16	hrs		1	buildings				0.00004 [0\/0.00440	01 00004000	S4	
	750	CTDAICH	T TIME BASE	MOOO	MANIACE	RS (GRADE 69 - 72)	C240C	Facilities Mgmt & Maintenan		0.88934 [SYS 06140] Linear	142.29 142.29		1
	Factors	160	hrs	IVIUZU	1	buildings	U2105	Facilities Mont & Maintenan	ice	Linear	142.29	nours	1
	raciors	100	1115		'	bullulilys				0.88934 [SYS 06140	01 88934200 -	System	
	A53	E-2		0000	NONE		C105S	Work Control Center		Linear	1.637.36		
	Factors	1800	\$		1	buildings		1.02283 FY00 Escalation	า				
										0.88934 [SYS 06140	01 .88934200 - 3	System	-
	A53	E-2		0000	NONE		K252S	Engineering		Linear	1.091.57	Dollars	
	Factors	1200	\$		1	buildings		1.02283 FY00 Escalation	n				
										0.88934 [SYS 06140	01 .88934200 - 3	System	
			Property Removal										
BOE			perience - Estimator ha em Desc - Estimator has								are Fetimat	or deve	loned
	a dis	posal co	st model that was adap					reaccess property and	property dis	poblicion for rour yea	arb. Bberman	or acve	Topca
			ost Data:										
			ty disposition There are and estima	ted 70	53 unita	that will require dis	nositio	nn					
			verage cost for one un						nt, .35 hrs	of Readiness removal	, .2 Hrs of		
			, .1 Hrs of material h	nandling	g, and .	35 hrs admin support.							
			ustment factor - None Cost - None										
			justment - None										
	This e	stimate	includes a project pro	ductiv	ty/effi	ciency factor for comm	itted b	out as yet undefined c	ost reductio	ons.			
Resources			Cost Element		,	Skill		Department		Curve	Ouantity	Units	
	750	STRAIGH	T TIME BASE	C010	CARPEN [®]	TERS	C211S	Electrical Maintenance		Linear	334.39	Hours]
	Factors	376	hrs										
										0.88934 [SYS 06140			1
	750		T TIME BASE	C020	ELECTRI	CIANS	C214S	Building Maintenance		Linear	376.19	Hours]
	Factors	423	hrs							0.00004 [0\/0.00440	01.00004000	S4	
	750	CTDAICH	T TIME BASE	C090	DLLIMBE	RS AND PIPEFITTERS	C212C	HVAC Maintenance		0.88934 [SYS 06140] Linear	543.39 543.39		1
	Factors	611	hrs	C080	ILTOMBE	ZO AND PIPEFII JEKO	U213S	Invac iviaintenance		Linear	543.39	nouis	ı
	ractors	011	1113							0.88934 [SYS 06140	01 88934200 -	System	
	•				-			*		0.00304 1010 00140	UI .UUJUTZUU - 1	71315111	s

WBS No: 1EEC08 Rockv Flats Closure Project Project Baseline Devl Activity ID: 1EEC8003 Baseline Cost and Basis of Estimate WBS Filter 1EEC

				baseline Cost an	u basis	or Estimate	Activity Filter	*	Starts In FY *
750	STRAIGHT	TIME BASE	E120	SAFETY ENGINEERS	C101S	Health & Safetv		Linear	626.99 Hours
Factors	705	hrs							
								0.88934 [SYS 06140	01 .88934200 - Svstem
750	STRAIGHT	TIME BASE	L090	GENERAL LABORER	C270S	Property Management		Linear	626.99 Hours
Factors	705	hrs							
								0.88934 [SYS 06140	01 .88934200 - Svstem

750 STRAIGHT TIME BASE M020 MANAGERS (GRADE 69 - 72) C210S Facilities Momt & Maintenance Linear 2.194.90 Hours

Factors 2468 hrs

0.88934 [SYS 061400] .88934200 - System

Line Item 881SPTAPEN - Planning & Engineering

BOE

Estimators Experience - Estimate is based on Hazards Reduction/Stabilization template prepared by the Kaiser-Hill PCI organization. Experience Item Desc - Planning & Engineering of Support Buildings

Breakdown of Cost Data:

Item - Planning & Engineering of Support Buildings

Units - 1)Dollars

Unit Cost - 1)217,080

Unit Cost Adjustment factor - None

Revised Unit Cost - None Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es	l e	Cost Element	Skill	Department	Curve	Ouantity Units
	A5R	MISC EXPENSES	0000 NONE	C104S Closure Management	Linear	8.124.14 Dollars
	-				1.045 5)/00 5	1. 41

Factors 0.25 Dollars per Square Foot 36000 Square Feet 1 Planning & Engineering 1.015 -- FY00 Escalation --

Line Item 881SPTBCHR - Characterization

BOE

Estimators Experience - Estimate is based on Hazards Reduction/Stabilization template prepared by the Kaiser-Hill PCI organization.

Experience Item Desc - Characterization of Support Buildings

Breakdown of Cost Data:

Item - Characterization of Support Buildings

Units - 1)Dollars

Unit Cost - 1)842,250

Unit Cost Adjustment factor - None

Revised Unit Cost - None Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

rces		Cost Element		Skill	Departmen	t	Curve	Quantity	Units
Į	A5R	MISC EXPENSES	0000 N	NONE	C104S Closure Management		Linear	27.297.11	Dollars

Factors 0.84 Dollars per Square Foot 36000 Square Feet 1.015 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - System

0.88934 [SYS 061400] .88934200 - System

Line Item 881SPTCSPR - Site Preparation BOE Estimators Experience

Estimators Experience - Estimate is based on Hazards Reduction/Stabilization template prepared by the Kaiser-Hill PCI organization.

Experience Item Desc - Site Preparation of Support Buildings

Breakdown of Cost Data:

Item - Site Preparation of Support Buildings

Units - 1)Dollars

Unit Cost - 1)6,480

Unit Cost Adjustment factor - None

Revised Unit Cost - None

Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es		Cost Element	Skill		Department		Curve	Quantity	Units
	A5R	MISC EXPENSES	0000	NONE	C104S	Closure Management	Linear	5,849.38	Dollars

Factors 0.18 Dollars per Square Foot 36000 Square Feet 1.015 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - System

WBS No: 1EEC08 Activity ID: 1EEC8003

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter 1EEC Activity Filter *

Starts In FY *

Line Item 881SPTDPYA - Physical Activities

BOE

Estimators Experience - Estimate is based on Hazards Reduction/Stabilization template prepared by the Kaiser-Hill PCI organization.

Experience Item Desc - Physical Activities - Support Buildings

Breakdown of Cost Data:

Item - Physical Activities - Support Buildings

Units - 1)Dollars

Unit Cost - 1)121,680

Unit Cost Adjustment factor - None

Revised Unit Cost - None Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

 Cost Element
 Skill
 Department
 Curve
 Quantity
 Units

 A5R
 MISC EXPENSES
 0000
 NONE
 C104S
 Closure Management
 Linear
 109.838.40
 Dollars

Factors 3.38 Dollars per Square Foot 36000 Square Feet 1.015 -- FY00 Escalation --

Line Item 881SPTEPMG - Project Management

0.88934 [SYS 061400] .88934200 - System

BOE

Estimators Experience - Estimate is based on Hazards Reduction/Stabilization template prepared by the Kaiser-Hill PCI organization.

Experience Item Desc - Project Management - Support Buildings

Breakdown of Cost Data:

Item - Project Management-Support Buildings

Units - 1)Dollars

Unit Cost - 1)25,920

Unit Cost Adjustment factor - None

Revised Unit Cost - None

Basis for adjustment -N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

ces	Cost Element		Skill		Department		Curve	Quantity	Units
	A5R	MISC EXPENSES	0000 NO	ONE	C104S	Closure Management	Linear	23.397.52	Dollars

Factors 0.72 Dollars per Square Foot 36000 Square Feet 1.015 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - System

Line Item 881SPTFSUS - Support Services

BOE Estimators Experience

Estimators Experience - Estimate is based on Hazards Reduction/Stabilization template prepared by the Kaiser-Hill PCI organization.

Experience Item Desc - Support Services - Support Buildings

Breakdown of Cost Data:

Item - Support Services - Support Buildings

Units - 1)Dollars

Unit Cost - 1)23,760

Unit Cost Adjustment factor -None

Revised Unit Cost - None

Basis for adjustment -N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

es	Cost Element Skill		Department		Curve	Ouantity	Units		
	A5R	MISC EXPENSES	0000	NONE	C104S	Closure Management	Linear	21.447.73	Dollars

Factors 0.66 Dollars per Square Foot 36000 Square Feet 1.015 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - System

Line Item SYS - Contingency And Escalation

BOE

Resources

es	Cost Element		Skill		Department	Curve	Quantity	Units
	CON	CONTINGENCY	0000 NONE	ZDEPT	No Department	Linear	91.386.76	Dollars
_	Factors 91386.8 Dollars							
	ESC	ESCALATION	0000 NONE	ZDEPT	No Department	Linear	34.465.13	Dollars

Factors 34465.1 Dollars

WBS No: 1EEC08 Activity ID: 1EEC8003

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Proiect Ba WBS Filter 1E Activity Filter *

Baseline Devl 1EEC

Starts In FY *

Report Totals:							
	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
	Total	Total	Cost	& Escalation	Cost		
	103.148	3.063.493	16.645.017	2.609.377	22.317.887	1.151.055	23.468.941

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